

FT	Peptide	/label= loop
FT	26..28	
FT	/label= beta-strand	
FT	29..40	
FT	/label= loop	
FT	41..47	
FT	/label= beta-strand	
FT	48..55	
FT	/label= loop	
FT	56..61	
FT	/label= beta-strand	
FT	62..65	
FT	/label= loop	
FT	66..71	
FT	/label= beta-strand	
FT	72..76	
FT	/label= loop	
FT	77..83	
FT	/label= beta-strand	
FT	84..98	
FT	/label= loop	
FT	99..105	
FT	/label= beta-strand	
FT	106..108	
FT	/label= loop	
FT	109..113	
FT	/label= beta-strand	
FT	111..115	
FT	/label= conserved_motif	
FT	114..118	
FT	/label= loop	
FT	117..121	
FT	/label= conserved_motif	
FT	119..123	
FT	/label= beta-strand	
FT	124..130	
FT	/label= loop	
FT	130..134	
FT	/label= conserved_motif	
FT	131..133	
FT	/label= beta-strand	
FT	134..148	
FT	/label= loop	
FT	146..149	
FT	/label= conserved_motif	
FT	149..153	
FT	/label= beta-strand	
XX		
XX	WO200020595-A1.	
PN		
PD	13-APR-2000.	
XX		
XX	08-OCT-1999;	99WO-US23533.
PF		
XX	08-OCT-1998;	98US-0169745.
PR		
XX		
PA	(ZYMO) ZYMOGENETICS INC.	
XX		
PI	Sheppard PO, West RR, Clegg CH;	
XX		
DR	WPI: 2000-303780/26.	
DR	N-PSDB: AAA09193, AAA09194.	
XX		
PT	Proteins useful for treatment of inflammatory conditions such as	
PT	rheumatoid arthritis and psoriasis are agonists or antagonists forms of	
PT	new interleukin-1 homologue	
XX		
PS	Disclosure; Page 52-53; 64pp; English.	
XX		
CC	This shows an interleukin-1 (IL-1) homologue, designated zllia3.	
CC	It is believed that zllia3 acts through IL-1 receptors. In general,	
CC	zllia3 proteins having a lys residue at position 148 will have	
CC	anti-inflammatory activity (e.g. AA92256), whilst those having Asp	

CC	(see AA22254) or Glu at this position will have pro-inflammatory
CC	action. Zilias is used to modulate an immune response in an animal
CC	(claimed). Antagonists zilias forms may be used to treat or prevent
CC	chronic inflammatory diseases such as rheumatoid arthritis,
CC	osteoarthritis and Lyme arthritis, psoriasis, to reduce tissue damage
CC	after ischemia, to treat septic shock, graft-versus-host disease and
CC	leukemia. The antagonists may also alleviate inflammatory bowel disease
CC	including Crohn's disease and ulcerative colitis, insulin-dependent
CC	diabetes mellitus, acute pancreatitis, glomerulonephritis and cerebral
CC	ischemia. A agonist of zilias may promote wound healing by IL-1
CC	effects on growth factor secretion and cell proliferation. They may also
CC	treat infections, especially gastrointestinal infections.
XX	
SQ	Sequence 155 AA:
Query Match	100.0%; Score 823; DB 21; Length 155;
Best Local Similarity	100.0%; Pred. No. 1,2e-86;
Matches 155; Conservative	0; Mismatches 0; Indels 0; Gaps 0
OY	1 MYLSCALCFPMKDSALKVLYLNHNNQLAGLAGAKVIKEEISIVPNWMLDASLPVLG 60
Db	1 mvlsgalcifmksdalkvlylnhnnqlaglagakviqgeesivpnwmlaslpvlg 60
OY	61 VQGSQCISCVGQGEPTLTLEPVNINELYAKESKSFTEYRDKGLTSSESAAYPGWF 120
Db	61 vqgsqciscvgqgeptlttlepvnimelylgakeskfstfyrrdmgltsfesaaypgwf 120
OY	121 LCTYPEADDPVRLTOLPENGGMARPTIDRYPOOCD 155
Db	121 lctypeadqpvrlltqlpengwmapltdifytqqcd 155
RESULT 4	
AAY45062.	
ID	AAY45062 standard; Protein; 155 AA.
XX	
AC	AAY45062;
XX	
DT	31-MAY-2000 (first entry)
XX	
DE	Human TANGO-93 protein.
XX	
KW	TANGO-93; cytokine; human; secreted protein; IL-1 expression; cancer;
KW	Interleukin-1 receptor antagonist; IL-1ra; inflammation; antisthmatic;
KW	immunosuppressive; antirheumatic; antiarthritic; antipsoriatic; asthma;
KW	antiinflammatory; antibacterial; anticancer; cytostatic; immunomodulator;
KW	osteopathic; dermatological; antidiabetic; psoriasis; ulcerative colitis;
KW	graft vs.-host disease; rheumatoid arthritis; inflammatory bowel disease;
KW	septic shock; cachexia; Crohn's disease; chronic myelogenous leukaemia;
KW	liver disease; diabetes; osteoarthritis; Hodgkin's disease; Lyme disease;
KW	autoimmune disease; myasthenia gravis; pharmacogenomic; diagnosis;
KW	chromosome 2; systemic lupus erythematosus; forensic; transgenic animal.
XX	
OS	Homo sapiens.
XX	
PN	WC020008045-A2.
PD	17-FEB-2000.
XX	
PX	06-AUG-1999; 99MO-US17886.
PF	
XX	
PR	07-AUG-1998; 98US-O131263.
XX	
PA	(MILL-) MILLENNIUM BIOTHEAPEUTICS INC.
XX	
P1	Pan Y;
XX	
DR	WPI: 2000-205669/18.
XX	
DR	N-PSDB; AAZ50812.
XX	
FT	Isolated nucleic acid sequences encoding TANGO-93 polypeptide useful for treating a variety of cellular processes e.g. asthma, rheumatoid

PT arthritis, psoriasis and autoimmune diseases
XX
PS Claim 9; Fig 2; 113pp; English.
XX
CC The present sequence is the human TANGO-93, a secreted protein that
CC belongs to the cytokine superfamily. It plays a role similar to secreted
CC Interleukin-1 receptor antagonist (IL-1ra) and its expression is
CC developmentally regulated in the uterus, placenta and skeletal muscles.
CC Human TANGO-93 gene is mapped to chromosome 2 within the IL-1 cluster.
CC TANGO-93 modulates immune mediated inflammation and IL-1 gene or protein
CC expression. TANGO-93 is useful as a modulating agent for regulating
CC cellular processes like asthma, graft vs host disease, rheumatoid
CC arthritis, psoriasis, inflammatory bowel disease, septic shock,
CC ulcerative colitis, Crohn's disease, chronic myelogenous leukemia,
CC cancer, liver disease, Hodgkin's disease, osteoarthritis, Lyme disease,
CC cachexia, and autoimmune diseases e.g. myasthenia gravis, autoimmune
CC diabetes and systemic lupus erythematosus. Partial TANGO-93 sequences
CC are useful in forensic biology for diagnostic and prognostic assays,
CC prophylactic and therapeutic treatment and pharmacogenomics. The DNA
CC sequences are useful as hybridisation probes and primers, for isolation
CC of TANGO-93 sequence and for the creation of transgenic animals.
XX
SQ Sequence 155 AA:

Query Match 100.0%; Score 823; DB 21; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.2e-86;
Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MYISGALCFRMDSAKVIYLNHNNOLLAGLHAGKVIKGEISVVPNRWLDASLSPVILG 60
Db 1 MYISGALCFRMDSAKVIYLNHNNOLLAGLHAGKVIKGEISVVPNRWLDASLSPVILG 60

QY 61 VOGSGQCLSCGVGQEPFTLTLEPVNIMELYLGAKESSKFTFYRRDGLTSSFESAAPGWF 120
Db 61 VOGSGQCLSCGVGQEPFTLTLEPVNIMELYLGAKESSKFTFYRRDGLTSSFESAAPGWF 120

QY 121 LCTVPADQPVRLTQLPENGWGNAPITDFYFOCCD 155
Db 121 LCTVPADQPVRLTQLPENGWGNAPITDFYFOCCD 155

RESULT 5
AAB87601
ID AAB87601 standard; Protein; 155 AA.
XX
AC AAB87601;
XX
DT 15-MAY-2001 (first entry).
XX
DE Human PRO4342.
XX
KW Human; PRO protein; mapping.
XX
OS Homo sapiens.
XX
PN WO200116318-A2.
XX
PD 08-MAR-2001.
XX
PF 24-AUG-2000; 2000WO-US23328.
XX
PR 01-SEP-1999; 99WO-US20111.
XX
PR 15-SEP-1999; 99WO-US21090.
XX
PR 07-DEC-1999; 99US-0169495.
XX
PR 09-DEC-1999; 99US-0170262.
XX
PR 11-JAN-2000; 2000US-0175481.
XX
PR 18-FEB-2000; 2000WO-US04341.
XX
PR 18-FEB-2000; 2000WO-US04342.
XX
PR 22-FEB-2000; 2000WO-US04414.
XX
PR 01-MAR-2000; 2000WO-US05601.
XX
PR 03-MAR-2000; 2000US-0187202.
XX
PR 25-APR-2000; 2000US-0199397.

PR 22-MAY-2000; 2000WO-US14042.
XX
PR 05-JUN-2000; 2000US-0209832.
XX
PA (GENTH) GENENTECH INC.
XX
XX Eaton DL, Filvaroff E, Gerritsen ME, Goddard A, Godowski PJ;
PI Grimaldi CJ, Gunney AL, Watanabe CK, Wood WI;
DR WPI; 2001-183260/18.
XX
CC N-PSDB: AAF92133.
XX
PT Eighty four nucleic acids encoding PRO polypeptides, useful in
PT molecular biology, including use as hybridization probes, and in
PT chromosome and gene mapping.
XX
PS Claim 12; Fig 152; 278pp; English.
XX
CC The present sequence is a human PRO polypeptide (secreted and
CC transmembrane). The PRO protein, and PRO agonists, PRO antagonists or
CC anti-PRO antibodies are useful for preparation of a medicament useful in
CC the treatment of a condition which is responsive to the PRO protein,
CC agonists, antagonists or anti-PRO antibodies. The PRO protein may also be
CC employed as molecular weight markers for protein electrophoresis. The PRO
CC coding sequence has applications in molecular biology, including use as
CC hybridisation probes, and in chromosome and gene mapping.
XX
SQ Sequence 155 AA:

Query Match 100.0%; Score 823; DB 22; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.2e-86;
Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MYISGALCFRMDSAKVIYLNHNNOLLAGLHAGKVIKGEISVVPNRWLDASLSPVILG 60
Db 1 MYISGALCFRMDSAKVIYLNHNNOLLAGLHAGKVIKGEISVVPNRWLDASLSPVILG 60

QY 61 VOGSGQCLSCGVGQEPFTLTLEPVNIMELYLGAKESSKFTFYRRDGLTSSFESAAPGWF 120
Db 61 VOGSGQCLSCGVGQEPFTLTLEPVNIMELYLGAKESSKFTFYRRDGLTSSFESAAPGWF 120

QY 121 LCTVPADQPVRLTQLPENGWGNAPITDFYFOCCD 155
Db 121 LCTVPADQPVRLTQLPENGWGNAPITDFYFOCCD 155

RESULT 6
AAB35260
ID AAB35260 standard; Protein; 155 AA.
XX
AC AAB35260;
XX
DT 08-MAY-2001 (first entry)
XX
DE Human IL-11L.
XX
XX Human; IL-11L; Interleukin-1 locus; IL-1beta; IL-1receptor; psoriasis;
KW Chromosome 2q13; inflammatory disease; heart disease; Graves' disease;
KW Rheumatoid arthritis; inflammatory bowel disorder; diabetes; cancer;
KW osteoporosis; systemic lupus erythematosus.
XX
OS Homo sapiens.
XX
PN WO200105974-A2.
XX
PD 25-JAN-2001.
XX
PF 17-JUL-2000; 2000WO-US19508.
XX
XX 16-JUL-1999; 99US-0144298.
XX
PA (INTE-) INTERLEUKIN GENETICS INC.

PI Nicklin M, Barton J;
 XX
 DR WPI: 2001-091974/10.
 XX
 PT Nucleic acids encoding human and murine interleukin-1L1 polypeptides
 PT useful for controlling inflammatory processes -
 XX
 XX Claim 11; Fig 3; 150pp; English.
 CC The present invention provides the protein and coding sequences of the
 CC human and murine interleukin-1L1 (IL-1L1) proteins. The IL-1L1 gene is
 CC located between the IL-1beta and IL-1receptor genes at human chromosome
 CC 2q13. The sequences are useful in the diagnosis, prevention and treatment
 CC of heart disease, cancer and inflammatory diseases such as rheumatoid
 CC arthritis, systemic lupus erythematosus, inflammatory bowel disorder,
 CC diabetes, psoriasis, osteoporosis, lichen sclerosis, ulcerative colitis,
 CC severe periodontal disease and pregnancy complications. The present
 CC sequence is the human IL-1L1 protein.
 XX
 SQ Sequence 155 AA;
 XX
 Query Match 100.0%; Score 823; DB 22; Length 155;
 Best Local Similarity 100.0%; Pred. No. 1.2e-86;
 Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MVLGALCFRMDKSAIKVLYLHNNQLLAGLHAGKVIKGEISVVPNRMLDASLSPVILG 60
 DB 1 mvlsgalcfmrkdsalkvlylhnnqllaglhhgkvikgeisvvpnrwldaslsplvllg 60
 QY 61 VGGSGCCLSCGVGQEPPTLTLEPVNIMELYGAKESKSFYFRDMDGLTSSFESAAYPGWF 120
 DB 61 vggsgcclscgvgeppltllepvnimelygakeskstfyrddmgltssfesaaaypgwf 120
 QY 121 LCTVPEADQPVRLTQLPENGWNAPIITDFFOCCD 155
 DB 121 lctvpeadqpvrltqlpengwnapitdfyfgcd 155
 DB 121 lctvpeadqpvrltqlpengwnapitdfyfgcd 155
 RESULT 7
 AAB35262
 ID AAB35262 standard; protein; 155 AA.
 AC AAB35262;
 XX
 DT 08-MAY-2001 (first entry)
 XX
 DE Interleukin-1L1 recombinant protein #1.
 XX
 KW Mouse; IL-1L1; interleukin-1 locus; IL-1beta; IL-1receptor; psoriasis;
 KW chromosome 2q13; inflammatory disease; heart disease; Graves' disease;
 KW rheumatoid arthritis; inflammatory bowel disorder; diabetes; cancer;
 KW osteoporosis; systemic lupus erythematosus; human.
 XX
 OS Unidentified.
 XX
 PN WO200105974-A2.
 XX
 PD 25-JAN-2001.
 XX
 PF 17-JUL-2000; 2000WO-US19508.
 XX
 PR 16-JUL-1999; 99US-0144298.
 XX
 PA (INTE-) INTERLEUKIN GENETICS INC.
 XX
 PI Nicklin M, Barton J;
 XX
 PT WPI: 2001-091974/10.
 XX
 DR Nucleic acids encoding human and murine interleukin-1L1 polypeptides
 PT useful for controlling inflammatory processes -
 XX

PS Examples; Fig 6; 150pp; English.
 XX
 CC The present invention provides the protein and coding sequences of the
 CC human and murine interleukin-1L1 (IL-1L1) proteins. The IL-1L1 gene is
 CC located between the IL-1beta and IL-1receptor genes at human chromosome
 CC 2q13. The sequences are useful in the diagnosis, prevention and treatment
 CC of heart disease, cancer and inflammatory diseases such as rheumatoid
 CC arthritis, systemic lupus erythematosus, inflammatory bowel disorder,
 CC diabetes, psoriasis, osteoporosis, lichen sclerosis, ulcerative colitis,
 CC severe periodontal disease and pregnancy complications. The present
 CC sequence is a recombinant IL-1L1 protein.
 XX
 SQ Sequence 155 AA;
 XX
 Query Match 100.0%; Score 823; DB 22; Length 155;
 Best Local Similarity 100.0%; Pred. No. 1.2e-86;
 Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MVLGALCFRMDKSAIKVLYLHNNQLLAGLHAGKVIKGEISVVPNRMLDASLSPVILG 60
 DB 1 mvlsgalcfmrkdsalkvlylhnnqllaglhhgkvikgeisvvpnrwldaslsplvllg 60
 QY 61 VGGSGCCLSCGVGQEPPTLTLEPVNIMELYGAKESKSFYFRDMDGLTSSFESAAYPGWF 120
 DB 61 vggsgcclscgvgeppltllepvnimelygakeskstfyrddmgltssfesaaaypgwf 120
 QY 121 LCTVPEADQPVRLTQLPENGWNAPIITDFFOCCD 155
 DB 121 lctvpeadqpvrltqlpengwnapitdfyfgcd 155
 DB 121 lctvpeadqpvrltqlpengwnapitdfyfgcd 155
 RESULT 8
 AAB66664
 ID AAB66664 standard; protein; 155 AA.
 AC AAB66664;
 XX
 DT 05-APR-2001 (first entry)
 XX
 DE Protein encoded by extended B2HFLS20W cDNA library sequence #2.
 XX
 KW Interleukin; IL-1 receptor; cancer; inflammation.
 XX
 OS Homo sapiens.
 XX
 PN WO200102571-A2.
 XX
 PD 11-JAN-2001.
 XX
 PF 07-JUL-2000; 2000WO-US18710.
 XX
 PR 07-JUL-1999; 99US-0348942.
 PR 13-OCT-1999; 99US-0417455.
 PR 08-DEC-1999; 99US-0457626.
 PR 10-MAR-2000; 2000US-0523552.
 PR 22-MAY-2000; 2000US-0576008.
 XX
 PA (HYSE-) HYSEQ INC.
 XX
 PI Ford J, Pace A;
 XX
 PT WPI: 2001-071582/08.
 XX
 DR Isolated nucleic acids encoding interleukin-1 (IL-1) receptor
 PT antagonist proteins (referred as IL-1Hy1), useful in the treatment of
 PT cancer, e.g. breast adenocarcinoma and brain tumors, and an
 PT inflammatory disease mediated by IL-18 -
 XX
 PS Claim 1; Fig 6; 179pp; English.
 XX
 CC The present invention relates to interleukin (IL)-1 receptor
 CC antagonist proteins. IL-1Hy1 is useful for treating cancer,
 CC

CC an inflammatory disease mediated by IL-18, inflammation
 CC resulting from infection or allergic reactions, and inflammation
 CC associated with chronic bronchitis, arthritis, diabetes or
 CC endothermia.

XX Sequence 155 AA:

Query Match 100.0%; Score 823; DB 22; Length 155;
 Best Local Similarity 100.0%; Pred. No. 1.2e-86;
 Matches 155: Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MVLGALCFRMDALKVLYLHNNQLAGLHAGVKYKEEISVVPNRWLDSLSPVILG 60
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 1 mvlsgalcfmrkdsalkvlylhnqllagglhagkvikgeisvvpnrwldaslsplvllg 60
 OY 61 VGGSGCISCVGQEPRTLLEPVNIMELYGAKESKSPFFRRDGLTSSFSAAVPGWF 120
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 61 vggsgqclscvgqgqepcltlepvnimelylgakeskstftrrdmgltsfesaaypgwf 120
 OY 121 LCTVPEADQPVRLTQLPENGGMNAPITDPYFOQCD 155
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 121 lctvpeadqpvrltqlpenggwnapitdtyfqcd 155

RESULT 9

AAV43526 AAV43526 standard; Protein; 155 AA.

XX AAV43526;

DT 26-JAN-2000 (first entry)

DE A human interleukin-1 receptor antagonist.

XX Human: interleukin-1 receptor; IL-1; antagonist; sepsis;
 KW acute pancreatitis; endotoxic shock; cytokine induced shock;
 KW rheumatoid arthritis; chronic inflammatory arthritis;
 KW pancreatic cell damage; diabetes mellitus type 1;
 KW graft versus host disease; inflammatory bowel disease;
 KW inflammation; pulmonary disease; autoimmune disease;
 KW inflammatory disease; antiproliferative; myelogenous leukemia;
 KW premature labor; intrauterine infection; nutritional activity;
 KW hematopoiesis regulating activity; tissue growth activity;
 KW activin activity; inhibin activity; chemotactic activity;
 KW chemokinetic activity; hemostatic activity; thrombolytic activity;
 KW anti-inflammatory activity.

XX Homo sapiens.

OS W09951744-A2.

PN 14-OCT-1999.

PD 05-APR-1999; 99WO-US04291.

XX 03-APR-1998; 98US-0055010.

XX 15-MAY-1998; 98US-0079909.

PR 20-MAY-1998; 98US-0082364.

PR 19-JUN-1998; 98US-0099818.

PR 31-JUL-1998; 98US-0127698.

PR 13-JAN-1999; 98US-0229591.

PR 17-FEB-1999; 99US-0251370.

XX (HYSE-) HYSEQ INC.

XX Drmanac R, Crkvenjakov R, Dickson M, Drmanac S, Labat I;
 PI Leshkowitz D, Kita D, Ford J, Pace A, Alfemito M;
 XX WPI; 1999-611042/52.
 DR N-PSDB; AA230050.
 XX New isolated interleukin-1 receptor binding polypeptides, used to treat

PT e.g. sepsis, shock, arthritis, pancreatitis, graft-versus-host disease,
 PT inflammatory disease, autoimmune disease or proliferative disease
 XX Claim 8; Fig 6; 123pp; English.

CC The present sequence represents a human interleukin-1 (IL-1)
 CC receptor antagonist. The polypeptide is capable of binding IL-1
 CC receptors (IL-1Rs). The polynucleotides and polypeptides can be used for
 CC the prevention or treatment of disorders involving sepsis, acute
 CC pancreatitis, endotoxic shock, cytokine induced shock, rheumatoid
 CC arthritis, chronic inflammatory arthritis, pancreatic cell damage from
 CC diabetes mellitus type 1, graft versus host disease, inflammatory bowel
 CC disease, inflammation associated with pulmonary disease, other autoimmune
 CC disease or inflammatory disease, an antiproliferative agent such as for
 CC acute or chronic myelogenous leukemia or in the prevention of premature
 CC labor secondary to intrauterine infections. They can also exhibit
 CC activities such as e.g. nutritional activity, cytokine and cell
 CC proliferation/differentiation activity, immune stimulating or
 CC suppressing activity, hematopoiesis regulating activity, tissue growth
 CC activity, activin/inhibin activity, chemotactic/chemokinetic activity,
 CC hemostatic and thrombolytic activity, receptor/ligand activity, and
 CC anti-inflammatory activity. The products can also be used for
 CC detection, diagnosis and drug screening.

XX Sequence 155 AA:

Query Match 99.6%; Score 820; DB 20; Length 155;
 Best Local Similarity 99.4%; Pred. No. 2.7e-86;
 Matches 154: Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 MVLGALCFRMDALKVLYLHNNQLAGLHAGVKYKEEISVVPNRWLDSLSPVILG 60
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 1 mvlsgalcfmrkdsalkvlylhnqllagglhagkvikgeisvvpnrwldaslsplvllg 60
 OY 61 VGGSGCISCVGQEPRTLLEPVNIMELYGAKESKSPFFRRDGLTSSFSAAVPGWF 120
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 61 vggsgqclscvgqgqepcltlepvnimelylgakeskstftrrdmgltsfesaaypgwf 120
 OY 121 LCTVPEADQPVRLTQLPENGGMNAPITDPYFOQCD 155
 ||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 121 lctvpeadqpvrltqlpenggwnapitdtyfqcd 155

RESULT 10

AAAB35263 AAB35263 standard; Protein; 154 AA.

XX AAB35263;

DT 08-MAY-2001 (first entry)

DE Interleukin-IL1 recombinant protein #2.

XX Mouse; IL-1L1; interleukin-1 locus; IL-1beta; IL-1receptor; psoriasis;
 KW chromosome 2q13; inflammatory disease; heart disease; Graves' disease;
 KW rheumatoid arthritis; inflammatory bowel disorder; diabetes; cancer;
 KW osteoporosis; systemic lupus erythematosus; human.

OS Unidentified.

PN W0200105974-A2.

PD 25-JAN-2001.

PF 17-JUL-2000; 2000WO-US19508.

PR 16-JUL-1999; 99US-0144298.

XX (INTE-) INTERLEUKIN GENETICS INC.

PI Nicklin M, Barton J;

DR WPI; 2001-091974/10.
XX Nucleic acids encoding human and murine interleukin-111 polypeptides
PT useful for controlling inflammatory processes -
XX
XX Examples: Fig 6; 150pp; English.
PS
CC The present invention provides the protein and coding sequences of the
CC human and murine interleukin-111 (IL-111) proteins. The IL-111 gene is
CC located between the IL-1beta and IL-1receptor genes at human chromosome
CC 2q13. The sequences are useful in the diagnosis, prevention and treatment
CC of heart disease, cancer and inflammatory diseases such as rheumatoid
CC arthritis, systemic lupus erythematosus, inflammatory bowel disorder,
CC diabetes, psoriasis, osteoporosis, lichen sclerosis, ulcerative colitis,
CC severe periodontal disease and pregnancy complications. The present
CC sequence is a recombinant IL-111 protein.
XX
SQ Sequence 154 AA:
Query Match 99.4%; Score 818; DB 22; Length 154;
Best Local Similarity 100.0%; Pred. No. 4.5e-86;
Matches 154; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 VLSGALCFRKKDSALKVLYHNNQLAGLHAGKVKGEISVVPNRMIDASIPVILGV 61
DB 1 VLSGALCFRKKDSALKVLYHNNQLAGLHAGKVKGEISVVPNRMIDASIPVILGV 60
QY 62 QGSGQCLSCGCGEPRTLLEPVNIMELYLAKESKSTFRROMGLTSSPESAAVPGWFL 121
DB 61 99SGQCLSCGCGEPRTLLEPVNIMELYLAKESKSTFYRDMGLTSSPESAAVPGWFL 120
QY 122 CTVPEDQPVRLTQLPENGMNAPITDFYPOQCD 155
DB 121 ctvpedqpvrltqlpengwnapitdfyfqcd 154
RESULT 11
AAB35264
ID AAB35264 standard; Protein; 157 AA.
XX
AC AAB35264;
XX
DT 08-MAY-2001 (first entry)
XX
DE Interleukin-111 recombinant protein #3.
XX
KW Mouse; IL-111; interleukin-1 locus; IL-1beta; IL-1receptor; psoriasis;
KW chromosome 2q13; inflammatory disease; heart disease; Graves' disease;
KW rheumatoid arthritis; inflammatory bowel disorder; diabetes; cancer;
KW osteoporosis; systemic lupus erythematosus; human.
XX
OS Unidentified.
XX
XX WO200105974-A2.
XX
XX 25-JAN-2001.
XX
XX 17-JUL-2000; 2000WO-US19508.
XX
XX 16-JUL-1999; 99US-0144298.
XX
XX (INTE-) INTERLEUKIN GENETICS INC.
XX
XX Nicklin M, Barton J;
XX
XX WPI; 2001-091974/10.
XX
XX Nucleic acids encoding human and murine interleukin-111 polypeptides
PT useful for controlling inflammatory processes -
XX
XX Examples: Fig 6; 150pp; English.
XX

CC The present invention provides the protein and coding sequences of the
CC human and murine interleukin-111 (IL-111) proteins. The IL-111 gene is
CC located between the IL-1beta and IL-1receptor genes at human chromosome
CC 2q13. The sequences are useful in the diagnosis, prevention and treatment
CC of heart disease, cancer and inflammatory diseases such as rheumatoid
CC arthritis, systemic lupus erythematosus, inflammatory bowel disorder,
CC diabetes, psoriasis, osteoporosis, lichen sclerosis, ulcerative colitis,
CC severe periodontal disease and pregnancy complications. The present
CC sequence is a recombinant IL-111 protein.
XX
SQ Sequence 157 AA:
Query Match 99.4%; Score 818; DB 22; Length 157;
Best Local Similarity 100.0%; Pred. No. 4.6e-86;
Matches 154; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2 VLSGALCFRKKDSALKVLYHNNQLAGLHAGKVKGEISVVPNRMIDASIPVILGV 61
DB 4 VLSGALCFRKKDSALKVLYHNNQLAGLHAGKVKGEISVVPNRMIDASIPVILGV 63
QY 62 QGSGQCLSCGCGEPRTLLEPVNIMELYLAKESKSTFRROMGLTSSPESAAVPGWFL 121
DB 64 99SGQCLSCGCGEPRTLLEPVNIMELYLAKESKSTFYRDMGLTSSPESAAVPGWFL 123
QY 122 CTVPEDQPVRLTQLPENGMNAPITDFYPOQCD 155
DB 124 ctvpedqpvrltqlpengwnapitdfyfqcd 157
RESULT 12
AA92256
ID AA92256 standard; Protein; 155 AA.
XX
AC AA92256;
XX
DT 10-AUG-2000 (first entry)
XX
DE Human IL-1 homologue, hz11a3-K148.
XX
KW Generic; interleukin-1; IL-1; homologue; z11a3; anti-inflammatory;
KW antagonist; pro-inflammatory; agonist; immunomodulator; antiarthritic;
KW antirheumatic; osteopathic; antipsoriatic; antibacterial; cytostatic;
KW immunosuppressive; antitumor; antidiabetic; nephroprotective; vasotrophic;
KW vulnerable.
XX
XX Homo sapiens.
XX
XX WO200020595-A1.
XX
XX 13-APR-2000.
XX
XX 08-OCT-1999; 99WO-US23533.
XX
XX 08-OCT-1998; 98US-0169745.
XX
XX (ZYMO) ZYMOGENETICS INC.
XX
XX Sheppard PO, West RR, Clegg CH;
XX
XX WPI; 2000-303780/26.
XX
XX N-PSDB; AAA09195.
XX
XX Proteins useful for treatment of inflammatory conditions such as
PT rheumatoid arthritis and psoriasis are agonists or antagonists forms of
PT new interleukin-1 homologue
XX
XX
PS Claim 4; Page 56-57; 64pp; English.
XX
XX This polypeptide is variant interleukin-1 (IL-1) homologue, designated
CC z11a3-K148. It is believed that z11a3 acts through IL-1 receptors.
CC In general, z11a3 proteins having a Lys residue at position 148 will
CC have anti-inflammatory activity, whilst those having Asp (see AA92254)

CC or Glu at this position will have pro-inflammatory action.
 CC zll1a3 is used to modulate an immune response in an animal (claimed).
 CC Antagonists zll1a3 forms may be used to treat or prevent chronic
 CC inflammatory diseases such as rheumatoid arthritis, osteoarthritis and
 CC Lyme arthritis, psoriasis, to reduce tissue damage after ischemia, to
 CC treat septic shock, graft-versus-host disease and leukemia.
 CC The antagonists may also alleviate inflammatory bowel disease including
 CC Crohn's disease and ulcerative colitis, insulin-dependent diabetes
 CC mellitus, acute pancreatitis, glomerulonephritis and cerebral ischemia.
 CC Agonist forms of zll1a3 may promote wound healing by IL-1 effects on
 CC growth factor secretion and cell proliferation. They may also treat
 CC infections, especially gastrointestinal infections.

XX Sequence 155 AA:

Query Match 99.1%; Score 816; DB 21; Length 155;
 Best Local Similarity 99.4%; Pred. No. 7.6e-86;
 Matches 154; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 MYLSGALCFRMDALVKVLYLHNQLLAGLHAGKYKGEISVVPNRMLDASLSPVILG 60
 DB 1 mvlsgalcfrmdsalvkylvlnhnlqllaglnagkvlkgeisvvpnrwldaslsplvllg 60
 OY 61 VOGGSOCLSCGVGOEPTLTLEPVNIMELYGAKESKSFYRRDGLTSSPESAAVPGMF 120
 DB 61 vggsgscclscgvgoeptltlepvnimelygakeskstfyrddmgltsfesaavpgwvf 120
 OY 121 LCTVPEADQPVRLTOLPENGGMNAPITDFYFOOCD 155
 DB 121 lctvpeadqpvrltqlpenggmnapitdfyfqqcd 155

RESULT 13

AAV92254
 ID AAV92254 standard; protein: 155 AA.

AC AAV92254;

DT 10-AUG-2000 (first entry)

DE Human IL-1 homologue, hzll1a3-D148.

XX Generic: interleukin-1; IL-1; homologue; zll1a3; anti-inflammatory;
 KW antagonist; pro-inflammatory; agonist; immunomodulator; antiarthritic;
 KW antirheumatic; osteopathic; antipsoriatic; antibacterial; cyostatic;
 KW immunosuppressive; antidiabetic; antidiabetic; nephrotropic; vasotropic;
 KW vulnerary.

XX Homo sapiens.

OS Homo sapiens.

XX Key Location/Qualifiers

FT Misc-difference 41 /label= Glu, Lys
 FT Misc-difference 99 /label= Ala, Ile, Thr

PN WO200020595-A1.

PD 13-APR-2000.

PF 08-OCT-1999; 99WO-US23533.

PR 08-OCT-1998; 98US-0169745.

PA (ZYMO) ZYMOGENETICS INC.

PI Sheppard PO, West RR, Clegg CH;

XX WPI; 2000-303780/26.

XX Proteins useful for treatment of inflammatory conditions such as
 PT rheumatoid arthritis and psoriasis are agonists or antagonists forms of

PT new interleukin-1 homologue

XX Claim 2: Page -: 64pp: English.

XX This is a generic interleukin-1 (IL-1) homologue, designated zll1a3.
 CC It is believed that zll1a3 acts through IL-1 receptors. In general,
 CC zll1a3 proteins having a Lys residue at position 148 (see AAV92255 and
 CC AAV92256) will have anti-inflammatory activity, whilst those having Asp
 CC (i.e. this sequence) or Glu at this position will have pro-inflammatory
 CC action. zll1a3 is used to modulate an immune response in an animal
 CC (claimed). Antagonists zll1a3 forms may be used to treat or prevent
 CC chronic inflammatory diseases such as rheumatoid arthritis,
 CC osteoarthritis and Lyme arthritis, psoriasis, to reduce tissue damage
 CC after ischemia, to treat septic shock, graft-versus-host disease and
 CC leukemia. The antagonists may also alleviate inflammatory bowel disease
 CC including Crohn's disease and ulcerative colitis, insulin-dependent
 CC diabetes mellitus, acute pancreatitis, glomerulonephritis and cerebral
 CC ischemia. Agonist forms of zll1a3 may promote wound healing by IL-1
 CC effects on growth factor secretion and cell proliferation. They may
 CC also treat infections, especially gastrointestinal infections.
 CC Note: This sequence is not given in the specification, it is created
 CC from SEQ. ID. 7, which is given on pages 55-56.

XX Sequence 155 AA:

Query Match 98.7%; Score 812; DB 21; Length 155;
 Best Local Similarity 98.7%; Pred. No. 2.2e-85;
 Matches 153; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 MYLSGALCFRMDALVKVLYLHNQLLAGLHAGKYKGEISVVPNRMLDASLSPVILG 60
 DB 1 mvlsgalcfrmdsalvkylvlnhnlqllaglnagkvlkgeisvvpnrwldaslsplvllg 60

OY 61 VOGGSOCLSCGVGOEPTLTLEPVNIMELYGAKESKSFYRRDGLTSSPESAAVPGMF 120
 DB 61 vggsgscclscgvgoeptltlepvnimelygakeskstfyrddmgltsfesaavpgwvf 120

OY 121 LCTVPEADQPVRLTOLPENGGMNAPITDFYFOOCD 155
 DB 121 lctvpeadqpvrltqlpenggmnapitdfyfqqcd 155

RESULT 14

AAV92253
 ID AAV92253 standard; protein: 155 AA.

AC AAV92253;

DT 10-AUG-2000 (first entry)

DE Generic human IL-1 homologue, hzll1a3-X148.

XX Generic: interleukin-1; IL-1; homologue; zll1a3; anti-inflammatory;
 KW antagonist; pro-inflammatory; agonist; immunomodulator; antiarthritic;
 KW antirheumatic; osteopathic; antipsoriatic; antibacterial; cyostatic;
 KW immunosuppressive; antidiabetic; antidiabetic; nephrotropic; vasotropic;
 KW vulnerary.

XX Homo sapiens.

OS Homo sapiens.

XX Key Location/Qualifiers

FT Misc-difference 41 /label= Glu, Lys

FT Misc-difference 99 /label= Ala, Ile, Thr

FT Misc-difference 148 /label= Glu, Lys, Asp

PN WO200020595-A1.

PD 13-APR-2000.

PF 08-OCT-1999; 99WO-US23533.
 XX
 PR 08-OCT-1998; 98US-0169745.
 XX
 PA (ZYMO) ZYMOGENETICS INC.
 XX
 PI Sheppard PO, West RR, Clegg CH;
 XX
 DR WPI; 2000-303780/26.
 XX
 PT Proteins useful for treatment of inflammatory conditions such as
 PT rheumatoid arthritis and psoriasis are agonists or antagonists forms of
 PT new interleukin-1 homologue
 XX
 PS Claim 1; Page 55-56; 64pp; English.
 XX
 CC This polypeptide is a generic interleukin-1 (IL-1) homologue, designated
 CC zilla3. It is believed that zilla3 acts through IL-1 receptors. In
 CC general, zilla3 proteins having a Lys residue at position 148 (see
 CC AAY92255 and AAY92256) will have anti-inflammatory activity, whilst those
 CC having Asp (see AAY92254) or Glu at this position will have
 CC pro-inflammatory action. Zilla3 is used to modulate an immune response in
 CC an animal (claimed). Antagonists zilla3 forms may be used to treat or
 CC prevent chronic inflammatory diseases such as rheumatoid arthritis,
 CC osteoarthritis and Lyme arthritis, psoriasis, to reduce tissue damage
 CC after ischemia, to treat septic shock, graft-versus-host disease and
 CC leukemia. The antagonists may also alleviate inflammatory bowel disease
 CC including Crohn's disease and ulcerative colitis, insulin-dependent
 CC diabetes mellitus, acute pancreatitis, glomerulonephritis and cerebral
 CC ischemia. Agonist forms of zilla3 may promote wound healing by IL-1
 CC effects on growth factor secretion and cell proliferation. They may also
 CC treat infections, especially gastrointestinal infections.
 CC
 XX Sequence 155 AA:
 SQ

Query Match 97.8%; Score 805; DB 21; Length 155;
 Best Local Similarity 98.1%; Pred. No. 1.4e-84;
 Matches 152; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MVLGALCFPMKDSALKVLTLLHNNQLLAGLHAGVKIKGEISVVPNRWIDASISPYILG 60
 Db 1 mvlsgalcfrmkdsalkvlylhmqlaaglhagkvikgeisvvpnrwidasispyilg 60

QY 61 VGGSGQCLSCGVGOEPTLTLEPVNIMELYGAKESKSFYRRDMGLTSSFESAAYPGWF 120
 Db 61 vggsgqclscgvgoeptltlepvnimelygakeskfsfyrddmgltsfesaaypgwf 120

QY 121 LCTVPEADQPVRLTQLPENGGMNAPITDFYFOCD 155
 Db 121 lctvpeadqpvrltqlpenggmnapitdfyfqcdd 155

RESULT 15
 AAY92255 AAY92255 standard; protein: 155 AA.
 XX
 AC AAY92255;
 XX
 DT 10-AUG-2000 (first entry)
 XX
 DE Generic human IL-1 homologue, hzilla3-K148.
 XX
 KW Generic; interleukin-1; IL-1; homologue; zilla3; anti-inflammatory;
 KW antagonist; pro-inflammatory; agonist; immunomodulator; antiarthritic;
 KW antihemematic; osteopathic; antipsoriatic; antibacterial; cytostatic;
 KW immunosuppressive; antidiabetic; antidiabetic; nephrotropic; vasotropic;
 KW vulnary.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Misc-difference 41

FT /label= Glu, Lys
 FT Misc-difference 99
 FT /label= Ala, Ile, Thr
 XX
 PN W0200020595-A1.
 XX
 PD 13-APR-2000.
 XX
 PF 08-OCT-1999; 99WO-US23533.
 XX
 PR 08-OCT-1998; 98US-0169745.
 XX
 PA (ZYMO) ZYMOGENETICS INC.
 XX
 PI Sheppard PO, West RR, Clegg CH;
 XX
 DR WPI; 2000-303780/26.
 XX
 PT Proteins useful for treatment of inflammatory conditions such as
 PT rheumatoid arthritis and psoriasis are agonists or antagonists forms of
 PT new interleukin-1 homologue
 XX
 PS Claim 3; Page -: 64pp; English.
 XX
 CC This is a generic interleukin-1 (IL-1) homologue, designated zilla3.
 CC It is believed that zilla3 acts through IL-1 receptors. In general,
 CC zilla3 proteins having a Lys residue at position 148 (this sequence
 CC and AAY92256) will have anti-inflammatory activity, whilst those having
 CC Asp (AAY92254) or Glu at this position will have pro-inflammatory
 CC action. Zilla3 is used to modulate an immune response in an animal
 CC (claimed). Antagonists zilla3 forms may be used to treat or prevent
 CC chronic inflammatory diseases such as rheumatoid arthritis,
 CC osteoarthritis and Lyme arthritis, psoriasis, to reduce tissue damage
 CC after ischemia, to treat septic shock, graft-versus-host disease and
 CC leukemia. The antagonists may also alleviate inflammatory bowel disease
 CC including Crohn's disease and ulcerative colitis, insulin-dependent
 CC diabetes mellitus, acute pancreatitis, glomerulonephritis and cerebral
 CC ischemia. Agonist forms of zilla3 may promote wound healing by IL-1
 CC effects on growth factor secretion and cell proliferation. They may
 CC also treat infections, especially gastrointestinal infections.
 CC Note: This sequence is not given in the specification, it is created
 CC from SEQ. ID. 7, which is given on pages 55-56.
 CC
 XX Sequence 155 AA:
 SQ

Query Match 97.8%; Score 805; DB 21; Length 155;
 Best Local Similarity 98.1%; Pred. No. 1.4e-84;
 Matches 152; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MVLGALCFPMKDSALKVLTLLHNNQLLAGLHAGVKIKGEISVVPNRWIDASISPYILG 60
 Db 1 mvlsgalcfrmkdsalkvlylhmqlaaglhagkvikgeisvvpnrwidasispyilg 60

QY 61 VGGSGQCLSCGVGOEPTLTLEPVNIMELYGAKESKSFYRRDMGLTSSFESAAYPGWF 120
 Db 61 vggsgqclscgvgoeptltlepvnimelygakeskfsfyrddmgltsfesaaypgwf 120

QY 121 LCTVPEADQPVRLTQLPENGGMNAPITDFYFOCD 155
 Db 121 lctvpeadqpvrltqlpenggmnapitdfyfqcdd 155

Search completed: June 25, 2001, 14:05:25
 Job time: 27 sec

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: June 25, 2001, 14:04:58 ; Search time 14.69 Seconds
(without alignments)
803,748 Million cell updates/sec

Title: US-09-612-921-4
Perfect score: 823
Sequence: 1 MVLSGALCFRKMDSALKVLY.....LPENGWNAPIITDFYFOQCD 155

Scoring table:
BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 219241 segs, 76174552 residues

Total number of hits satisfying chosen parameters: 219241

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	823	100.0	155	2 JC7104	interleukin-1 rece
2	319.5	38.8	177	2 A30368	interleukin-1 rece
3	319.5	38.8	180	2 A39386	interleukin-1 rece
4	308.5	37.5	178	2 A44610	interleukin-1 rece
5	292.5	35.5	178	2 C40956	interleukin-1 rece
6	286.5	34.8	177	2 A54377	interleukin-1 rece
7	141.5	17.2	266	1 S23010	interleukin-1 beta
8	138.5	16.8	266	1 IC801B	interleukin-1 beta
9	130	15.8	267	2 S38373	interleukin-1 beta
10	129	15.7	267	1 JN0724	interleukin-1 beta
11	124.5	15.1	214	2 JC5646	interleukin-1 beta
12	123	14.9	269	1 IC801B	interleukin-1 beta
13	120	14.6	268	1 A30584	interleukin-1 beta
14	119.5	14.5	269	1 I55969	interleukin-1 beta
15	80.5	9.8	1230	2 T30517	complement C3-Q2 -
16	80.5	9.8	1272	2 S26180	neurofascin - chic
17	80	9.7	364	2 T05401	hypothetical prote
18	80	9.7	374	2 S18887	H+-transporting AT
19	80	9.7	374	2 D64420	N-methylhydantoina
20	79.5	9.7	2352	2 C83229	probable non-ribos
21	78.5	9.5	437	2 I40176	ATP sulfurylase -
22	78	9.5	2970	2 T08839	polypeptide - marm
23	75.5	9.2	551	2 H81552	methionyl-tRNA syn
24	75.5	9.2	551	2 C86506	methionyl-tRNA syn
25	75.5	9.2	634	2 S32349	probable SNF2-type
26	74.5	9.1	272	2 T25044	hypothetical prote
27	74.5	9.1	452	1 D69810	phosphotransferase
28	73	8.9	200	2 B75137	ubiquitinone/menapi
29	73	8.9	1123	2 D96756	receptor-like prot

30	72	8.7	423	2 B86214	hypothetical prote
31	71.5	8.7	551	2 H72117	methionine--tRNA 1
32	71.5	8.7	578	2 T45107	H+-transporting AT
33	71.5	8.7	700	2 T34321	hypothetical prote
34	71.5	8.7	1036	2 B83466	probable RND efflu
35	71.5	8.7	1110	2 T33877	hypothetical prote
36	71	8.6	475	2 G84697	hypothetical prote
37	71	8.6	535	2 T06285	hypothetical prote
38	71	8.6	611	2 A48582	vacuolar ATPase A
39	70.5	8.6	778	2 D72421	xylosidase - Thern
40	70.5	8.6	1161	2 T18642	hypothetical prote
41	70	8.5	269	2 C83516	hypothetical prote
42	70	8.5	305	2 E83091	ATP sulfurylase sm
43	70	8.5	323	2 A82433	fructokinase VCA06
44	69.5	8.4	801	2 B86673	penicillin-binding
45	69	8.4	152	2 B43863	hypothetical prote

ALIGNMENTS

RESULT 1
JC7104
Interleukin-1 receptor antagonist - human
C:Species: Homo sapiens (man)
C>Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 21-Jul-2000
C:Accession: JC7104
R:Mulero, J.J.; Pace, A.M.; Nelson, S.T.; Loeb, D.B.; Corree, T.R.; Drmanac, R.; Ford
Biochem. Biophys. Res. Commun. 263, 702-706, 1999
A>Title: IL1HY1: A novel interleukin-1 receptor antagonist gene.
A:Reference number: JC7104; MUID:99443727
A:Accession: JC7104
A:Molecule type: mRNA
A:Residues: 1-155 <MUI>
A:Cross-references: GB:A1186094; NID:96049804; PIDN:AAF02757.1; PID:96049805
C:Genetics:
A:Gene: il1hy1
A:Map position: 2q14
C:Keywords: macrophage

Query Match 100.0%; Score 823; DB 2; Length 155;
Best Local Similarity 100.0%; Pred. No. 2.3e-77;
Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Db 1 MVLSGALCFRKMDSALKVLYLNHNNOLLAGGLHAGKIKGEISVVRNMLDASLSVYIG 60
QY 61 VQGSQCLSCGVGOEPTLTLEPNIMELYGAKESKSFYPRDMGLTSSFESAAYPGWF 120
Db 61 VQGSQCLSCGVGOEPTLTLEPNIMELYGAKESKSFYPRDMGLTSSFESAAYPGWF 120
QY 121 LCTVPEADQPVRLTQLPENGWNAPIITDFYFOQCD 155
Db 121 LCTVPEADQPVRLTQLPENGWNAPIITDFYFOQCD 155
RESULT 2
A30368
Interleukin-1 receptor antagonist secreted form precursor - human
C:Species: Homo sapiens (man)
C>Date: 07-Jun-1990 #sequence_revision 07-Jun-1990 #text_change 26-May-2000
C:Accession: A40956; I37894; A30368; S08160; S08159; A37822
R:Eisenberg, S.P.; Brewer, M.T.; Verderber, E.; Heimdal, P.; Brandhuber, B.J.; Thomps
Proc. Natl. Acad. Sci. U.S.A. 88, 5232-5236, 1991
A>Title: Interleukin 1 receptor antagonist is a member of the interleukin 1 gene fami
A:Reference number: A40956; MUID:91271363
A:Accession: A40956
A:Molecule type: DNA
A:Residues: 1-177 <EIS>
A:Cross-references: GB:M63099; NID:9186385; PIDN:AA841943.1; PID:9186386
R:Lennard, A.; Gorman, P.; Carrier, M.; Griffiths, S.; Scotney, H.; Sheer, D.; Solari

Cytokine 4, 83-89, 1992

A:Title: Cloning and chromosome mapping of the human interleukin-1 receptor antagonist gene

A:Reference number: I37894, MUID:9338323

A:Accession: I37894

A:Status: translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-177 <LEN>

A:Cross-references: EMBL:X64532; NID:933798; PIDN:CAA5832.1; PID:933799

R:Cartier, D.B.; Deibel Jr., M.R.; Dunn, C.J.; Tomich, C.S.C.; Laborde, J.

J.G.; Siew, L.C.; Haldee, M.M.; Zucher-Neely, H.A.; Reardon, I.M.; Helinikson, R.L.; T

Nature 344, 633-638, 1990

A:Title: Purification, cloning, expression and biological characterization of an interleukin-1

A:Reference number: A30368; MUID:90220867

A:Accession: A30368

A:Molecule type: mRNA

A:Residues: 1-177 <CAR>

A:Cross-references: GB:X53296; NID:932578; PIDN:CAA37386.1; PID:932579

A:Note: parts of this sequence, including the amino end of the mature protein, were confir

R:Elsemberg, S.P.; Evans, R.J.; Arend, W.P.; Verderber, E.; Brewer, M.T.; Hannum, C.H.;

Nature 343, 341-346, 1990

A:Title: Primary structure and functional expression from complementary DNA of a human i

A:Reference number: S08160; MUID:90136921

A:Accession: S08160

A:Status: not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-177 <E12>

A:Cross-references: GB:X52015; NID:932576; PIDN:CAA36262.1; PID:932577

R:Hannum, C.H.; Wilcox, C.J.; Arend, W.P.; Joslin, F.G.; Drilpps, D.J.; Helmdal, P.L.; An

Nature 343, 336-340, 1990

A:Title: Interleukin-1 receptor antagonist activity of a human interleukin-1 inhibitor.

A:Reference number: S08159; MUID:90136920

A:Accession: S08159

A:Molecule type: protein

A:Residues: 26-75;97-108;110-116;120-131;163-176 <HAN>

R:Blenkowski, M.J.; Ebesulu, T.E.; Berger, A.E.; Truesdell, S.E.; Shelly, J.A.; Laborde,

J. Biol. Chem. 265, 14505-14511, 1990

A:Title: Purification and characterization of interleukin 1 receptor level antagonist protein

A:Reference number: A37822; MUID:90354444

A:Accession: A37822

A:Molecule type: protein

A:Residues: 26-52;70-77;122-127;170-175 <BIE>

A:Experimental source: culture medium, PMA-stimulated THP-1 cells

C:Comment: For an alternative splice form, see PIR:A39386

C:Genetics:

C:Gene: GDB:11ARN

A:Cross-references: GDB:125897; OMIM:147679

A:Map position: 2q14.2-2q14.2

A:Introns: 39/2; 69/1; 106/3

C:Superfamily: interleukin-1

C:Keywords: alternative splicing; cytokine receptor; extracellular protein; glycoprotein; interleukin-1

F:26-177/Product: interleukin-1 receptor antagonist #status predicted <SIG>

F:109/Binding site: carbohydrate (Asn) (covalent) #status experimental

Query March	38.8%;	Score 319.5;	DB 2;	Length 177;
Best Local Similarity	49.3%;	Pred. 0.1, 7e-25;		
Matches	73;	Conservative 13;	Mismatches 49;	Indels 13; Gaps 4;

QY	9	FRMDSLAKLYLHNNQLLAGGLHAGKAYIKGEELISVYVRNMLDASLSP--VILGYOGSGQ	66
DB	38	FRIMDVNOKETTYLRNNQLVAGSLQGPVNLLEKIDVYV-----TEPHALFLGIHGGM	90
QY	67	CLSC-GVGQEPITLLEPVNIMELYLGAKESKSTFFTYRRDMGLTSSFSFSAAYPGVELTVP	125
DB	91	CLSCVKSQDETRLLQLEAVNITDLSENRRQDKRFATIRSDSGPTTSFESAACPGMFLCTAM	150
QY	126	EADQPVRLTQLPENGGWNAPIITDFYFOO	153
DB	151	EADQPVSLTNMPDEG---VMYTKFFQEE	175

RESULT	3
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A:39386
N:Contains: Interleukin-1 receptor antagonist, long intracellular splice form - human
C:Species: Homo sapiens (man)
C:Date: 26-Feb-1992 #sequence
C:Accession: I37893; A39386
R:Murio, M.; Polentarutti, N.; Sironi, M.; Poli, G.; De Giola, L.; Introna, M.; Mantovani, J. Exp. Med. 182, 623-628, 1995
A:Title: Cloning and characterization of a new isoform of the Interleukin 1 receptor
A:Reference number: I37893; MUID:95355865
A:Accession: I37893
A:Status: translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-180 <RES>
A:Cross-references: EMBL:X8348; NID:91008970; PID:CA59087.1; PID:91008971
R:Haaklin, S.; Mattlin, G.; Van Le, L.; Morris, J.; Peace, A.; Bigler, C.F.; Jaffe, G. Proc. Natl. Acad. Sci. U.S.A. 88, 3681-3685, 1991
A:Title: cDNA cloning of an intracellular form of the human interleukin 1 receptor and
A:Reference number: A39386; MUID:91219436
A:Accession: A39386
A:Molecule type: mRNA
A:Residues: 1-3,25-180 <HAS>
A:Cross-references: GB:M5646; NID:g186291; PID:AAA5138.1; PID:g186292
C:Comment: For an alternative splice form, see PIR:A30368
C:Genetics:
A:Gene: GDB:IL1RN
A:Cross-references: GDB:125897; OMIM:147679
A:Map position: 2q14.2-2q14.2
C:Superfamily: Interleukin-1
C:Keywords: alternative splicing; cytokine receptor
P:1-180/Product: Interleukin-1 receptor antagonist, long intracellular splice form #s
P:1-3,25-180/Product: Interleukin-1 receptor antagonist, short intracellular splice f

```

Query Match          39.8% ; Score 319.57; DB 2; Length 180;
Best Local Similarity 48.3%; Pred. No. 1.7e-25;
Matches 73; Conservative 13; Mismatches 49; Indels 13; Gaps 4;

Oy      9 FRMKDALKVLYLHNNQLLAGLHGAKYIKGEISVPNRMLDASLP--VILGVGGSG 66
       |||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||
Db      41 FRIMDVNQKFTYLRRNQVLGAVGLQGPVNLEEKIDYVP-----IEPHALFLGIHGKM 93

Oy      67 CLSC-GVGQEPPLTLEPNINMELIYGAKESKSFYYRDMQLTSFSESAATPGMFCTIVP 125
       |||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||
Db      94 CLSCSKSDERLTGLEAVNITDLSENRRQDRFAIRISDGPTTSFEASACPGWFLCTAM 153

Oy      126 EADDPVRLTLPELNGGNNAPIIDFFEQ 153
       ||||||||::|||::|||::|||::|||::|||::|||::|||::|||::|||::|||
Db      154 EADDPVSILTNPDEG---VMWTKEFFQE 178

RESULT    4
A44610
N:Interleukin-1 receptor antagonist precursor - mouse
N:Alternate names: IL-1Ra
C:Species: Mus musculus (house mouse)
C:Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 16-Jul-1999
C:Accession: A44610; BA0956; AA9031; I56106; I52970
R:Matsushima, H.; Rousset, M.F.; Matsushima, K.; Hisshinuma, A.; Sherr, C.J.
Blood 78, 616-623, 1991
A>Title: Cloning and expression of murine interleukin-1 receptor antagonist in macroph
A:Reference number: A44610; MUID:91316273
A:Accession: A44610
A:Molecule type: mRNA
A:Residues: 1-178 <MAT>
A:Molecule type: DNA
A:Residues: 7-178 <EIS>

```

A:Cross-references: GB:M63100; NID:g198389; PIDN:AAA39310_1; PID:g198390
R:Shuck, M.E.; Bessall, T.E.; Tracey, D.E.; Bienkowski, M.J.
Eur. J. Immunol. 21, 2775-2780, 1991

A>Title: Cloning, heterologous expression and characterization of murine interleukin 1 receptor cDNA
A.Reference number: MA9031; MUID:92037824
A.Accession: AA9031
A.Molecule type: mRNA

A:Residues: 23-178 <SHU>
A:Cross-references: GB:S64082; NID:g238584; PIDN:AAB20265_1; PID:g238585
A:Experimental source: peritoneal macrophages, ICR strain
A>Note: sequence extracted from NCBI backbone (NCBIP:64085)
R:Zanetti, K.; Seldin, M.F.; Rits, M.; Ezekowitz, R.B.; Whitehead, A.S.
J. Immunol. 146, 4228-4233, 1991

A>Title: Mouse IL-1 receptor antagonist protein: Molecular characterization, gene mapping and cloning
A.Reference number: I56106; MUID:91250712
A.Accession: I56106
A>Status: preliminary; translated from GB/EMBL/DDBJ
A.Molecule type: mrna
A:Residues: 1-178 <RES>

A:Cross-references: GB:M4294; NID:g198387; PIDN:AAA39309_1; PID:g198388
R:zanetti, K.A.; Unhar, C.M.; Rits, M.; Prada, A.E.; Whitehead, A.S.
Cytokine 6, 1-9, 1994

A>Title: The mouse interleukin 1 receptor antagonist protein: gene structure and regulation
A.Reference number: I52970; MUID:94271931
A.Accession: I52970
A>Status: preliminary; translated from GB/EMBL/DDBJ
A.Molecule type: DNA
A:Residues: 1-178 <RE2>

A:Cross-references: GB:L32838; NID:g487864; PIDN:AAA20576_1; PID:g528978
G:Genetics:
A:Gene: IL-1rn
A:introns: 40/2; 70/1; 107/3
C:Superfamily: Interleukin-1
C:Keywords: cytokine receptor
F:1-26/domain: signal sequence #status predicted <SIG>
F:127-178/Product: interleukin-1 receptor antagonist #status predicted <MA2>

Query Match 37.5% Score 308.5 DB 2 Length 178;
Best Local Similarity 48.0%; Pred.No. 2,3e-24;
Matches 71; Conservative 15; Mismatches 49; Indels 13; Gaps 4;

OY 9 FRMKSAALKVLYLHNNOILAGIGHAKGVKGEISVPENRMIDLASPIYLGGVOGSQCL 68
 |::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::
Db 39 FRIWNTNGKTFLRNNOILIAGLOSPNIKLEKITDMP-----IDLHVSPLIHSGKIQL 93
OY 69 SCG-VGEPTLTLPFNIMELYLGAKESKSFTFYRDDGLTFSSFSAAYPGWFICTYPEA 127
 |||||::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::
Db 94 SCASKGDIDIKOLEEVNTITDSLKNKEEKRFETIRSEKGPTSSESACPGWFICTYLEA 153
OY 128 DDPVRILTQLPENGGNAP--TIDFEFOQ 153
 |::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::|::
Db 154 DRPVSLTMPPE----PLIVTKFFQE 176

RESULT 5
C40956
Interleukin-1 receptor antagonist precursor - rat
C:Species: Rattus norvegicus (Norway rat)
C>Date: 20-Mar-1992 #sequence_revision 20-Mar-1992 #text_change 16-Jul-1999
C:Accession: C40956
R:Eisenberg, S.P.; Brewer, M.T.; Verderber, E.; Helmdal, P.; Brandhuber, B.J.; Thompson, Proc. Natl. Acad. Sci. U.S.A. 88, 5233-5236, 1991
A>Title: Interleukin 1 receptor antagonist is a member of the interleukin 1 gene family
A:Reference number: A40956; MUID:91271363
A.Accession: C40956
A>Status: Preliminary
A:Molecule type: DNA
A:Residues: 1-178 <EIS>
A:Cross-references: GB:M63101; NID:g204928; PIDN:AAAA1434_1; PID:g204929
C:Keywords: cytokine receptor

```

Query Match          35.5%; Score 292.5; DB 2; Length 178;
Best Local Similarity 45.9%; Pred. No. 1e-22;
Matches 67; Conservative 14; Mismatches 56; Indels 9; Gaps 3;

QY 9 FRMKDSALKVLYLHNNQLLAGGLHAGKYIKGEISVVPNRWLDASLP-VIIIGVGGSQCL 68
   || : | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 39 FRIMVTGNKFTFLRNNOVLAGILOGPNTKLBEKKIDMV-----IDFRNVLGIHGGRKCL 93
   || | | | | | | | | | | | | | | | | | | | | | | | | | | | |

QY 69 SC-GVGQEPITLTLEPVNIMELYLGAKESESTFFRRDMGLTSSFESEAYPGWFICTYPEA 127
   || | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 94 SCVKSGDDTKLOLEEVNITDNLNKNEEDKRPTFKRSEGPPTSSESLACPGMFICTYLEA 153
   || | | | | | | | | | | | | | | | | | | | | | | | | | | | |

QY 128 DQVRILTQLEPENGWNAPITDFEYFOO 153
   || | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 154 DHFVSLTNTPKE---PCTVTKTFYOE 176
   || | | | | | | | | | | | | | | | | | | | | | | | | | | | |

RESULT 6
Interleukin-1 receptor antagonist secreted form precursor - rabbit
A54377
C:Species: Oryctolagus cuniculus (domestic rabbit)
C:Date: 06-Oct-1994 #sequence_revision 10-Nov-1994 #text_change 16-Jul-1999
J:Accession: A54377; J: Bortolami, M.; Pizarro, T.T.; Monsacchi, L.; Ferretti, M.; Brewer, M.
J: Biol. Chem. 269, 6962-6971, 1994
A>Title: Rabbit interleukin-1 receptor antagonist. Cloning, expression, functional ch
A:Reference number: A54377; MUID:94165101
A:Accession: A54377
A:Molecule type: mRNA
A:Residues: 1-177 <COM>
A:Cross-references: GB:568977; NID:g545740; PID:AAB30093.1; PID:g545741
A:Experimental source: colon tissue
A>Note: sequence extracted from NCBI backbone (NCBIN:144168, NCBI:P144169)
R:Goto, F.; Goto, K.; Miyata, T.; Ohkawara, S.; Takao, T.; Mori, S.; Furukawa, S.; Ma
Immunology 77, 235-244, 1992
A>Title: Interleukin-1 receptor antagonist in inflammatory exudate cells of rabbits. P
A:Reference number: I46729; MUID:93052512
A:Accession: I46729
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-177 <GON>
A:Cross-references: GB:D21832; NID:g425787; PID:BAA04860.1; PID:g452205
C:Superfamily: Interleukin-1
C:Keywords: cytokine, receptor; extracellular protein; glycoprotein
F:1-35/Domain: signal sequence #status predicted <rig>
F:105/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match          34.8%; Score 286.5; DB 2; Length 177;
Best Local Similarity 45.9%; Pred. No. 4.1e-22;
Matches 68; Conservative 17; Mismatches 50; Indels 13; Gaps 4;

QY 9 FRMKDSALKVLYLHNNQLLAGGLHAGKYIKGEISVVPNRWLDASLP-VIIIGVGGSQ 66
   || : | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 38 FRIMVNOKFTFLRNNOVLAVAGILOGPNAKLEERIDVDP-----LEQLLFILGIQRKCL 90
   || | | | | | | | | | | | | | | | | | | | | | | | | | | | |

QY 67 CISC-GVGQEPITLTLEPVNIMELYLGAKESESTFFRRDMGLTSSFESEAYPGWFICTYP 125
   || | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 91 CISCVKSSDKMLHLAEAVNITDLGNKNKODRPFTRIRNSGPTTFESASCOPGFICTAL 150
   || | | | | | | | | | | | | | | | | | | | | | | | | | | | |

QY 126 EADQPVRLTQLEPENGWNAPITDFEYFOO 153
   || | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 151 EADQPVSLTNTPD---SIIVTKTFYOE 175
   || | | | | | | | | | | | | | | | | | | | | | | | | | | | |

RESULT 7
Interleukin-1 beta precursor - sheep
S23010
N:Alternate names: hematopoietin-1; IL-1 beta
C:Species: Ovis orientalis arles, Ovis ammon arles (domestic sheep)
C:Date: 08-Jun-1994 #sequence_revision 22-Nov-1996 #text_change 15-Oct-1999
J:Accession: S23010; S43047; S13092; B61246

```

R.Seow, H.F.; Rothel, J.S.; David, M.J.; Wood, P.R.
DNA Seq. 1, 423-426, 1991
A>Title: Nucleotide sequence of ovine macrophage interleukin-1 beta cDNA.
A:Reference number: 523010; MUID:92119335
A:Accession: 523010
A:Molecule type: mRNA
A:Residues: 1-266 <SDED>
A:Cross-references: EMBL:X56972; NID:91808; PIDs:CAA40293.1; PID:g1809
A>Note: the sequence from Fig. 1 is inconsistent with that from Fig. 2 in having an add
R.Satyan, D.R.
submitted to the EMBL Data Library, May 1992
A:Reference number: 543047
A:Accession: 543047
A:Molecule type: mRNA
A:Residues: 1-13, 'C', 15-54, 'K', 56-63, 'A', 65-144, 'L', 146-266 <SAR>
A:Cross-references: EMBL:X54796; NID:g1273; PIDs:CAA38566.1; PID:g1274
R.Fiskerstrand, C.; Sargan, D
Nucleic Acids Res. 18, 7165, 1990
A>Title: Nucleotide sequence of ovine interleukin-1 beta.
A:Reference number: 513092; MUID:91088326
A:Accession: 513092
A:Molecule type: mRNA
A:Residues: 1-13, 'C', 15-54, 'K', 56-61, 'S', 63, 'A', 65-144, 'L', 146-266 <FIS>
A:Cross-references: EMBL:X54796
A>Note: The authors translated the codon AGT for residue 62 as Arg
R.Andrews, A.E.; Barcham, G.J.; Brandon, M.R.; Nash, A.D.
Immunology 74, 453-460, 1991
A>Title: Molecular cloning and characterization of ovine IL-1alpha and IL-1beta.
A:Reference number: A61246; MUID:92120716
A:Accession: B61246
A:Molecule type: mRNA
A:Residues: 1-144, 'L', 146-266 <AND>
A:Comment: This protein lacks a conventional signal sequence for protein export. Cleavage
wed form of interleukin-1beta, unlike interleukin-1alpha, is inactive.
C:Comment: Interleukin-1beta precursor is less heavily myristoylated than interleukin-1a
C:Genetics:
A:Gene: IL-1-beta
C:Superfamily: Interleukin-1
C:Keywords: cytokine; Immunoregulation; Inflammation; lymphokine; macrophage; mitogen
F:114-266/Product: Interleukin-1 beta #status predicted <MAT>

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A:Cross-references: GB:M37211; NID:g163200; PION:AAA30584.1; PID:g163201
R:Leong, S.R.; Flagg, G.M.; Lawman, M., Gray, P.W.
Nucleic Acids Res. 16, 9054, 1988
A:Title: The nucleotide sequence for the cDNA of bovine Interleukin-1 beta.
A:Reference number: S01380; MUID:89016591
A:Accession: S01380
A:Molecule type: mRNA
A:Residues: 1-251, 'A', 253-266 <LEO>
A:Cross-references: EMBL:X12498; NID:g448; PID:CAA31018.1; PID:g449
C:Comment: This protein is a cytokine that mediates a variety of immunoregulatory and
C:Comment: This protein lacks a conventional signal sequence for protein export. Clea-
ved form of interleukin-1beta, unlike interleukin 1-alpha, is inactive.
C:Comment: Interleukin-beta precursor is less heavily myristoylated than interleukin
C:Superfamily: Interleukin-1
C:Keywords: cytokine; immunoregulation; inflammation; lymphokine; macrophage; mitogen
F:114-266/Product: Interleukin-1 beta #status predicted <MA>

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Query Match      16.8%; Score 138.5; DB 1; Length 266;
Best Local Similarity 31.9%; Pred. No. 1.2e-06;
Matches 43; Conservative 22; Mismatches 55; Indels 15; Gaps 5;

OY 16 LKVLVHNQLLAGLHAGKYIKGEISVVRNRLDLSLYILGVGGSCCLSC-GVGQ 74
    |||::: : : : : :|||::: :|||: :|||:
Db 139 LKAHLHLSEQENRRVEFCMSFVGGEERD-----NKIPVALGIKKNNYLSCVKRGD 189
    |||::: : : : : :|||::: :|||: :|||:

OY 75 EPITILEPVNIIMELYLGAKESKSFTFYRRODGLTSSFESAYPGMLCTQPEADQPYRLT 134
    |||::: : : : : :|||::: :|||: :|||:
Db 190 TPTLTGLEVD-PKYIYPRNMKEKRFVFYTEIKNTVEPESVLYPMWYSTISOIERPPFLG 248
    |||::: : : : : :|||::: :|||:

OY 135 QLPENGGMNAPIITDF 149
    ||: :|||
Db 249 HF--RGGD--ITDF 259
    ||: :|||

RESULT 9
S38373
Interleukin-1 beta precursor - pig
C:Species: Sus scrofa domestica (domestic pig)
C>Date: 20-May-1994 #sequence_revision 01-Dec-1995 #text_change 16-Jul-1999
C:Accession: S38373
R:Van den Broeck, K.; Flitn, P.; Beuken, E.; Martens, E.; Janssen, A.; van Damme, J.; O
Eur. J. Biochem. 217, 45-52, 1993
A:Title: Gene sequence, cDNA construction, expression in Escherichia coli and genetic
A:Reference number: S38373; MUID:94039070
A:Accession: S38373
A>Status: preliminary
A:Molecule type: DNA
A:Residues: 1-267 <VAN>
A:Cross-references: EMBL:X74568; NID:g407899; PID:CAAS2660.1; PID:g407900
C:Genetics:
A:Insertions: 16/2; 33/3; 99/1; 154/1; 197/3
C:Superfamily: Interleukin-1

Query Match      15.8%; Score 130; DB 2; Length 267;
Best Local Similarity 29.3%; Pred. No. 8.7e-06;
Matches 44; Conservative 21; Mismatches 63; Indels 22; Gaps 5;

OY 1 MYLGCALCFRRKBDALKVLYLHNNQLLAGGLHAGKYIKGEISVVRNRLDASLPYLIG 60
    ::||: |::|: : : : :::|: ||
Db 132 LVLAG-----PHLKATLHLTKGDLKREVVFCMSFVGOD-----SDDKIPVTLG 175
    ::||: |::|: : : : :::|: ||

OY 61 VOGSGSCISCVCVGE-PLTILEPVNIIMELYLGAKESKSFTFYRRODGLTSSFESAAYPGW 119
    ::||: |||: :|||::: : :|||: :|||: ||
Db 176 IKGNLNLYLCWMKDPTLTQLEDVD-PKSYPKRMKEKRFVFKYIKNRVFEESALYPMW 234
    ::||: |||: | :||| ||||

OY 120 FLCTIVPEADQPYRLTQLPENCGMNAPIITDF 149
    ::||: |||
Db 235 YISTSQAEQKFVFL-----GNSKGQDIIITDF 260
    ::||: |||

RESULT 10
```

JN0724
Interleukin-1 beta precursor - pig
N:Alternate names: hematopoietin-1; IL-1 beta
C:Species: Sus scrofa domestica (domestic pig)
C:Date: 14-Jul-1994 #sequence_revision 22-Nov-1996 #text_change 22-Jun-1999
C:Accession: JN0724
R:Huether, M.J.; Lin, G.; Smith, D.M.; Murtaugh, M.P.; Mollitor, T.W.
Gene 129, 285-289, 1993
A:Title: Cloning, sequencing and regulation of an mRNA encoding porcine interleukin-1 beta
A:Reference number: JN0724; MUID:93314975
A:Accession: JN0724
A:Molecule type: mRNA
A:Residues: 1-267 <HUE>
A:Cross-references: GB:M86725; NID:9164607; PIDN:AAA02584.1; PID:g164608
A:Experimental source: alveolar macrophage
C:Comment: This protein is a pleiotropic cytokine that mediates a variety of processes involved form of interleukin-beta, unlike interleukin 1-alpha, is inactive.
C:Comment: Interleukin-beta precursor is less heavily myristoylated than interleukin-1a
C:Superfamily: Interleukin-1
C:Keywords: cytokine; immunoregulation; inflammation; lipoprotein; lymphokine; macrophag
F:115-267/Product: Interleukin-1 beta #status predicted <ILI>
F:77/Binding site: myristate (Lys) (covalent) #status predicted

Query Match 15.7%; Score 129; DB 1; Length 267;
Best Local Similarity 28.7%; Pred. No. 1.1e-05;
Matches 43; Conservative 23; Mismatches 62; Indels 22; Gaps 5;

OY 1 MVLGALCPKMDALKLYLHNNQLAGLAGKVIKGEISVVPNRMLDASLSPVILG 60
DB 132 LVLAG-----PHMKRALHLTGDLKREVFQMSFVQGDSDN-----KRIPTVLG 175
OY 61 VQGSQGLSCGV-GQEPITLLEPNVIMELYLAKESKSFYRDMGLTSPESAAYPGM 119
DB 176 IKKNILYSCVMQDNFTPTQLIEDID-PKRRPKDMKRRVFTETKKNRVEFSALYPMW 234
OY 120 FLCTVPEADQPVRLTQLPENGGMNAPITDF 149
DB 235 YISTSQAEQKPVFL-----GNSKGRQDITDF 260

RESULT 11
JC5646
Interleukin-1 beta - horse
C:Species: Equus caballus (domestic horse)
C:Date: 28-Oct-1997 #sequence_revision 28-Oct-1997 #text_change 20-Jun-2000
C:Accession: JC5646
R:Kato, H.; Yon, H.Y.; Ohashi, T.; Watari, T.; Goitsuka, R.; Tsujimoto, H.; Hasegawa, A.
Gene 177, 11-16, 1996
A:Title: Identification of an alternatively spliced transcript of equine interleukin-1 beta
A:Reference number: JC5646; MUID:97080493
A:Accession: JC5646
A:Molecule type: mRNA
A:Residues: 1-214 <KAR>
A:Cross-references: DBJ:D42165; NID:92463549; PIDN:BA22528.1; PID:92463550
C:Comment: This protein mediates a variety of physiological response to infections and synthesis by hepatocytes, and stimulation of chondrocytes and synovial cells to produce C:Superfamily: Interleukin-1

Query Match 15.1%; Score 124.5; DB 2; Length 214;
Best Local Similarity 33.3%; Pred. No. 2.4e-05;
Matches 39; Conservative 15; Mismatches 48; Indels 15; Gaps 5;

OY 37 IKGEISVVPNRMLDASLSPVILGQGSQGLSCGVQ-EPTITLLEPNVIMELYLCAKES 95
DB 108 VQGE-----ETDKIPVALGELKEKNLYLSCGMKDKPPTQLTETVD-PNTYPRKME 157
OY 96 KSFTFRDMGLTSPESAAYPGMFLCTVPEADQPVRLTQLPENGGMNAPITDFEYQ 152
DB 158 KRVFKMKELKGVFEESAMYPWYISTQAEKSPVFLGN--TRGG--RDITDFIME 210

RESULT 12

ICHD1B

Interleukin-1 beta precursor [validated] - human
N:Alternate names: hematopoietin-1; IL-1 beta
C:Species: Homo sapiens (man)
C:Date: 28-Feb-1986 #sequence_revision 15-May-1998 #text_change 15-Sep-2000
C:Accession: A25542; A29019; A94023; A93361; I51852; I65200; I8132; B27616; A01848;
R:Clark, B.D.; Collins, K.L.; Gandy, M.S.; Webb, A.C.; Auron, P.E.
Nucleic Acids Res. 14, 7897-7914, 1986
A:Title: Genomic sequence for human prointerleukin 1 beta: possible evolution from a
A:Reference number: A25542; MUID:87040762
A:Accession: A25542
A:Molecule type: DNA; mRNA
A:Residues: 1-5, 'K', 7-269 <CLA>
A:Cross-references: GB:X04500; NID:933788
A:Note: the mRNA sequence had codon AAG for 6-Lys, the DNA sequence had GAG for 6-Glu
R:Bensi, G.; Raugel, G.; Palla, E.; Carinchi, V.; Buonamassa, D.T.; Melll, M.
Gene 52, 95-101, 1987
A:Title: Human interleukin-1 beta gene.
A:Reference number: A29019; MUID:87248099
A:Accession: A29019
A:Molecule type: DNA
A:Residues: 1-269 <BEN>
A:Cross-references: GB:M15840; NID:9186281; PIDN:AA74137.1; PID:9386816
R:Auron, P.E.; Webb, A.C.; Rosenwasser, L.J.; Mucci, S.F.; Rich, A.; Wolff, S.M.; Din
Proc. Natl. Acad. Sci. U.S.A. 81, 7907-7911, 1984
A:Title: Nucleotide sequence of human monocyte interleukin 1 precursor cDNA.
A:Reference number: A94023; MUID:85088517
A:Accession: A94023
A:Molecule type: mRNA
A:Residues: 1-5, 'K', 7-269 <AUR>
A:Cross-references: GB:K02770; NID:9186268; PIDN:AAA36106.1; PID:9307043
R:March, C.U.; Mosley, B.; Larsen, A.; Cerretti, D.P.; Braedt, G.; Price, V.; Gillis,
Nature 315, 641-647, 1985
A:Title: Cloning, sequence and expression of two distinct human interleukin-1 complex
A:Reference number: A93361; MUID:85240547
A:Accession: A93361
A:Molecule type: mRNA
A:Residues: 1-269 <KAR>
A:Cross-references: GB:X02532; NID:933789; PIDN:CAA26372.1; PID:933790
A:Note: parts of this sequence, including the amino end of the mature form, were conf
R:Webb, A.C.; Dinarello, C.A.; Rosenwasser, L.J.; Mucci, S.F.; Rich, A.; Wolff, S.M.;
Adv. Gene Technol. 22, 339-340, 1985
A:Title: Nucleotide sequence of human monocyte interleukin 1 precursor cDNA.
A:Reference number: I51852
A:Accession: I51852
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-5, 'K', 7-19, 'H', 21-110, 'Q', 112-176, 'A', 178-213, 'P', 215-269 <WEB>
A:Cross-references: GB:M54933; NID:9186287; PIDN:AAA59136.1; PID:9186288
R:Nishida, T.; Nishino, N.; Takano, M.; Kawai, K.; Bando, K.; Masui, Y.; Nakai, S.; H
Biochem. Biophys. Res. Commun. 143, 345-352, 1987
A:Title: cDNA Cloning of IL-1 alpha and IL-1 beta from mRNA of U937 cell line.
A:Reference number: I52217; MUID:87156769
A:Accession: I65200
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-269 <NIS>
A:Cross-references: GB:M15330; NID:9186283; PIDN:AAA59135.1; PID:9307045
R:Kotenko, S.V.; Bulenkov, M.T.; Velko, V.P.; Epshin, S.M.; Lomakin, I.B.; Emel'Yano
11, S.A.; Vinetskii, Y.P.
Dokl. Akad. Nauk SSSR 309, 1005-1008, 1989
A:Title: [Cloning of the cDNA coding for human prointerleukin-1 alpha and prointerleu
A:Reference number: I8131; MUID:90249285
A:Accession: I8132
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-269 <KOR>
A:Cross-references: EMBL:X56087; NID:935662; PIDN:CAA39567.1; PID:935663
R:Zebo, K.M.; Wypych, J.; Tuschekoff, V.N.; Lu, H.; Hunt, P.; Dukas, P.P.; Langley,
Blood 71, 962-968, 1988
A:Title: Effects of hematopoietin-1 and interleukin 1 activities on early hematopoiet

A:Reference number: A90732; MUID:88184226
A:Accession: B27616
A:Molecule type: Protein
A:Residues: 117-123, 'X', 125-126, 'X', 128 <ZSE>
R:Stevenson, F.T.; Bursten, S.L.; Fanton, C.; Lockaley, R.M.; Lovett, D.H.
Proc. Natl. Acad. Sci. U.S.A. 90, 7245-7249, 1993
A:Title: The 31-kDa precursor of interleukin 1alpha is myristoylated on specific lysines
A:Contents: annotation; myristylation of lysines
R:Nanduti, V.B.; Holmes, J.D.; Pan, Y.C.E.; Kilian, P.L.; Stern, A.S.
Biochim. Biophys. Acta 1118, 25-35, 1991
A:Title: The role of arginine residues in interleukin 1 receptor binding.
A:Reference number: S19608; MUID:92110334
A:Contents: annotation; type 1 IL-1 receptor interaction site
A:Note: modification of Arg-120 by phenylglyoxal blocks receptor binding
R:Clow, G.M.; Gronenborn, A.M.
Submitted to the Brookhaven Protein Data Bank, January 1991
A:Reference number: A50049; PDB:611B
A:Contents: annotation; conformation by (13)C- and (1)H-NMR, residues 117-269
R:Clow, G.M.; Wrigfield, P.T.; Gronenborn, A.M.
Biochemistry 30, 2315-2323, 1991
A:Title: High-resolution three-dimensional structure of interleukin 1beta in solution by
A:Reference number: A44675; MUID:91159409
A:Contents: annotation; (1)H-NMR structural determination
R:Hazud, D.J.; Strickler, J.; Simon, P.; Young, P.R.
J. Biol. Chem. 266, 7081-7086, 1991
A:Title: Structure-function mapping of interleukin 1 precursors. Cleavage leads to a cort
A:Reference number: A39774; MUID:91201363
A:Contents: annotation
R:Finzel, B.C.; Watenpaugh, K.D.; Einspahr, H.M.
Submitted to the Brookhaven Protein Data Bank, December 1989
A:Reference number: A50016; PDB:111B
A:Contents: annotation; X-ray crystallography, 2.0 angstroms, residues 119-269
R:Finzel, B.C.; Clancy, L.L.; Holland, D.R.; Muchmore, S.W.; Watenpaugh, K.D.; Einspahr,
J. Mol. Biol. 209, 779-791, 1989
A:Title: Crystal structure of recombinant human interleukin-1beta at 2.0 angstrom resolu
A:Reference number: A44666; MUID:90064532
A:Contents: annotation; X-ray crystallography, 2.0 angstroms
A:Comment: This protein lacks a conventional signal sequence for protein export. Cleavage
ved form of interleukin-1beta, unlike interleukin 1-alpha, is inactive.
C:Comment: Interleukin-1beta precursor is less heavily myristoylated than interleukin-1a
A:Genetics:
A:Gene: GDB:111B
A:Cross-references: GDB:120094; OMIM:147720
A:Map position: 2q13-2q21
A:Introns: 16/2; 33/3; 101/1; 156/1; 199/3
C:Superfamily: Interleukin-1
C:Keywords: cytokine; immunoregulation; inflammation; lipoprotein; lymphokine; macrophag
E:117-269/Product: interleukin-1 beta #status experimental <tl>
E:76/Binding site: myristate (lys) (covalent) (partial) #status experimental
E:123/Binding site: carboxylate (Asn) (covalent) #status absent

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Query Match      14.9% Score 123; DB 1; Length 269;
Best Local Similarity 29.0% Pred. No. 4.6e-05;
Matches 45; Conservative 23; Mismatches 61; Indels 26; Gaps 6;

QY      1 MYLSGALCFRRKDSALKLYLHNNQLLAGLHAGVIKGEISYVNPBMLDASLPVILG 60
      :|||      |||      :      :|||      |||
Db      134 LVMSPY-----ELKRLHLDQGDMEQVYVFSMSFVGESN-----DKPIPALG 177
      :|||      :|||      :|||      :|||      :|||

QY      61 VQGSQCLSCGV-GOEPTLLLEPVNIMELYIAKESKSFYYRRDMGLTSSFESNAYPGW 119
      :|||      :|||      :|||      :|||      :|||
Db      178 LKERNLVLSCLVLLKDKDPTLQLESVD-PKNYPKKKKERFRFENKILNKKLEFESNQPFNW 236
      :|||      :|||      :|||      :|||      :|||

QY      120 FLCTVYPENDQPVRLTLQLPENGGMN--PITDFPYQ 152
      :|||      :|||      :|||      :|||
Db      237 YISTSQAEINMPVFL-----GGTRGGQDITDFTMQ 265
      :|||      :|||      :|||      :|||

RESULT 13
A30584
interleukin-1 beta precursor - rabbit

```

N:Alternate names: hematopoietin-1; IL-1 beta; lymphocyte proliferation potentiating
C:Species: *Oryzias latipes* (domestic rabbit)
C:Date: 25-May-1999 #sequence_revision 22-Nov-1996 #text_change 22-Jun-1999
C:Accession: A27714; A30584; J00082; A32166
R:Moti, S.; Goto, F.; Goto, K.; Okawara, S.; Maeda, S.; Shimada, K.; Yoshinaga, M.
Biochem. Biophys. Res. Commun. 150, 1237-1243, 1988
A:Title: Cloning and sequence analysis of a cDNA for lymphocyte proliferation potenti-
A:Reference number: A27714; MUID:88134238
A:Accession: A27714
A:Status: not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-268 <CDS>
R:Cannon, J.G.; Clark, B.D.; Wingfield, P.; Schmeissner, U.; Losberger, C.; Dinarello
J. Immunol. 142, 2299-2306, 1989
A:Title: Rabbit IL-1. Cloning, expression, biologic properties, and transcription dur-
A:Reference number: A30584; MUID:89176242
A:Accession: A30584
A:Molecule type: mRNA
A:Residues: 1-268 <CAN>
A:Cross-references: GB:426295; NID:9516632; PID:AAA31373.1; PID:9516633
R:Young, P.R.; Sylvester, D.
Protein Eng. 2, 545-551, 1989
A:Title: Cloning of rabbit interleukin-1 beta: differential evolution of IL-1 alpha a
A:Reference number: A94230; MUID:89315718
A:Accession: J00082
A:Molecule type: mRNA
A:Residues: 1-268 <YOU>
C:Comment: This protein lacks a conventional signal sequence for protein export. Clea-
ved form of interleukin-1beta, unlike interleukin 1-alpha, is inactive.
C:Comment: Interleukin-1beta precursor is less heavily myristoylated than interleukin
C:Superfamily: interleukin-1
C:Keywords: cytokine; immunoregulation; inflammation; lymphokine; macrophage; mitogen
#:117-268/Product:Interleukin-1 beta #status predicted <ILB>

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Query March 14.6% Score 120; DB 1; Length 268;
Best Local Similarity 29.3% Pred. No. 9.3e-05;
Matches 44; Conservative 21; Mismatches 63; Indels 22; Gaps 5;

OY 1 MYLGALCFRRKDAKLVLYLHNNQLLAGGHACKVIKGEISVYVNRWLDASIPYLIG 60
      |||||      |||||      |||||      |||||      |||||
Db 133 LVLSGT-----ELKRLHNAEHLNQGVVFSMSFQGEESN-----DKPIPALG 176
      ::|||      ::|||      ::|||      ::|||      ::|||

OY 61 VQGSQCLSCGV-GQEPPLTLEPVYINMELYGAESKSFYTRDMDGLTSFESAAPGW 119
      ::|||      ::|||      ::|||      ::|||      ::|||
Db 177 LRGKLYLSTSCWKDKDPPLQLAESVD-PNRYPKKMKERKFEYENKIKDLKEFESAQPPNW 235
      ::|||      ::|||      ::|||      ::|||      ::|||

OY 120 FLCTVPEADQPVRLTQLPENGMNAPIRDF 149
      ::|||      ::|||      ::|||
Db 236 YISTSTQTYMPVFL-----GNSSGQDLDF 261
      ::|||      ::|||      ::|||

RESULT 14
155969
N:Interleukin-1 beta precursor - mouse
A:Alternate names: hematopoietin-1; IL-1 beta
C:Species: Mus musculus (house mouse)
C:Date: 26-Jul-1996 #sequence_revision 22-Nov-1996 #text_change 22-Jun-1999
C:Accession: I55969; A24719; S13029
J:Gray, P.W.; Glaister, D.; Chen, E.; Goeddel, D.V.; Penhica, D.
J:Immunol. 137, 3644-3648, 1986
A:Title: Two interleukin 1 genes in the mouse: Cloning and expression of the cDNA for
A:Reference number: I55969; MUID:87058957
A:Accession: I55969
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-269 <RES>
A:Cross-references: GB:M15131; NID:q198293; PIDN:AAA39276.1; PID:q30398
R:Telford, J.L.; Macchia, G.; Massone, A.; Carinchi, V.; Palla, E.; Melli, M.
Nucleic Acids Res. 14, 9955-9963, 1986
A:Title: The murine interleukin 1-beta gene: structure and evolution.
A:Reference number: A24719; MUID:87117546
A:Accession: A24719

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GenCore version 4.5
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OM protein - protein search, using sw model

Run on: June 25, 2001, 14:05:28 ; Search time 9.53 Seconds

(without alignments)
557,146 Million cell updates/sec

Title: US-09-612-921-4

Perfect score: 823

Sequence: 1 MVLGALCFRKKDSALKRLVY.....LPENGWNPITDFYFQOCD 155

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 93435 seqs, 34255486 residues

Total number of hits satisfying chosen parameters: 93435

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_39.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	319.5	38.8	177	IL1X_HUMAN	P18510 homo sapien
2	308.5	37.5	178	IL1X_MOUSE	P25085 mus musculu
3	305.5	37.1	177	IL1X_PIG	Q29056 sus scrofa
4	295.5	35.9	174	IL1X_BOVIN	O77482 bos taurus
5	292.5	35.5	178	IL1X_RAT	P25086 rattus norv
6	286.5	34.8	177	IL1X_RABIT	P26890 oryctolagus
7	273.5	33.2	177	IL1X_HORSE	O18899 equus cabal
8	141.5	17.2	266	IL1B_SHEEP	P21621 ovis aries
9	140.5	17.1	266	IL1B_CEREL	P51745 cervus elap
10	135.5	16.5	266	IL1B_BOVIN	P09428 bos taurus
11	132	16.0	268	IL1B_HORSE	Q28386 equus cabal
12	129.5	15.7	266	IL1B_CAPRI	P79162 capra hircu
13	129	15.7	267	IL1B_PIG	P26889 sus scrofa
14	127	15.4	269	IL1B_MACMU	P48090 macaca mula
15	126	15.3	268	IL1B_MACFA	P79182 macaca fasc
16	124	15.1	269	IL1B_MACNE	P51493 macaca neme
17	123	14.9	269	IL1B_HUMAN	P01584 homo sapien
18	120	14.6	268	IL1B_RABIT	P14628 oryctolagus
19	119.5	14.5	269	IL1B_MOUSE	P10749 mus musculu
20	119	14.5	267	IL1B_FELCA	P41687 felis silve
21	116.5	14.2	268	IL1B_RAT	Q63664 rattus norv
22	116	14.1	269	IL1B_CERTO	P46648 cercopithec
23	79	9.6	318	SYGA_MORCA	P77992 moraxella c
24	78.5	9.5	437	SAT_RIPPS	Q54506 riftia pach
25	75.5	9.2	551	SYM_CHLUP	Q92859 chlamydia p
26	71.5	8.7	578	VARA_METMA	Q60186 metanosarc
27	71	8.6	611	VARA_PLAFA	Q03498 plasmodium
28	70	8.5	271	IL1A_MACFA	P79340 macaca fasc
29	70	8.5	271	IL1A_MACMU	P48089 macaca mula
30	69	8.4	305	CYSD_PSEAE	Q50273 pseudomonas
31	69	8.4	152	VTYA_TREHY	Q06809 treponema h
32	69	8.4	224	DKKA_HUMAN	Q9ubd3 homo sapien
33	69	8.4	352	P2Y7_HUMAN	Q15722 homo sapien

ALIGNMENTS

RESULT	1	IL1X_HUMAN	STANDARD:	PRT:	177 AA.
AC	P18510:	IL1X_HUMAN			
DT	01-NOV-1990 (Rel. 16, Created)				
DT	01-NOV-1990 (Rel. 16, Last sequence update)				
DT	01-OCT-2000 (Rel. 40, Last annotation update)				
DE	INTERLEUKIN-1 RECEPTOR ANTAGONIST PROTEIN PRECURSOR (IL-1RA) (ICIL-1RA) (IRAP) (IL-1RN).				
DE	IL1RN OR IL1RA.				
GN	Homo sapiens (Human).				
OS	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.				
OX	NCBI_TaxID=9606;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RX	MEDLINE=90220867; PubMed=2139180;				
RA	Carter D.B., Deibel M.R. Jr., Dunn C.J., Tomich C.S.C., Laborde A.L., Slightom J.L., Berger A.E., Bienkowski M.J., Sun F.F., McEwan R.N., Harris P.K.W., Yem A.W., Waszak G.A., Chosay J.G., Siew L.C., Harder M.M., Zurcher-Neely H.A., Reardon I.M., Heinrichson R.L., Truesdell S.E., Shelly J.A., Essatsu T.E., Taylor B.M., Tracey D.E.;				
RA	"Purification, cloning, expression and biological characterization of an interleukin-1 receptor antagonist protein.";				
RL	Nature 344:633-638(1990).				
RN	[2]				
RP	SEQUENCE FROM N.A.				
RX	MEDLINE=90136921; PubMed=2137201;				
RA	Eisenberg S.P., Evans R.J., Arend W.P., Verderber E., Brewer M.T., Hannum C.H., Thompson R.C.;				
RA	"Primary structure and functional expression from complementary DNA of a human interleukin-1 receptor antagonist.";				
RL	Nature 343:341-346(1990).				
RN	[3]				
RP	SEQUENCE FROM N.A.				
RX	MEDLINE=91271363; PubMed=1828896;				
RA	Eisenberg S.P., Brewer M.T., Verderber E., Heimdal P., Brandhuber B.J., Thompson R.C.;				
RA	"Interleukin 1 receptor antagonist is a member of the interleukin 1 gene family: evolution of a cytokine control mechanism.";				
RL	Proc. Natl. Acad. Sci. U.S.A. 88:5232-5236(1991).				
RN	[4]				
RP	SEQUENCE FROM N.A.				
RX	MEDLINE=92338323; PubMed=1385987;				
RA	Lennard A., Gorman P., Carrier M., Griffiths S., Scotney H., Sheer D., Solari R.;				
RA	"Cloning and chromosome mapping of the human interleukin-1 receptor antagonist gene.";				
RL	Cytokine 4:83-89(1992).				
RN	[5]				
RP	SEQUENCE FROM N.A.				
RX	MEDLINE=97146044; PubMed=8992991;				
RA	Jenkins J.K., Drog R.F., Shuck M.E., Bienkowski M.J., Slightom J.L., Arend W.P., Smith M.F. Jr.;				
RA	"Intracellular IL-1 receptor antagonist promoter: cell type-specific and inducible regulatory regions.";				
RL					

34	69	8.4	695	1	TRE_RABIT	P19134 oryctolagus
35	68.5	8.3	133	1	Y4D0_RHISN	P55414 rhizobium s
36	68.5	8.3	2201	1	P0LG_CXAG	P21404 c genome po
37	68	8.3	1447	1	DCC_HUMAN	P43146 homo sapien
38	68	8.3	1447	1	DCC_MOUSE	P70711 mus musculu
39	67.5	8.2	615	1	VAH2_HUMAN	P38607 homo sapien
40	67.5	8.2	617	1	VAA1_BOVIN	P31404 bos taurus
41	67.5	8.2	617	1	VAA1_HUMAN	P38606 homo sapien
42	67.5	8.2	617	1	VAA1_MOUSE	P50516 mus musculu
43	67.5	8.2	617	1	VATA_MANSE	P31400 manduca sex
44	67	8.1	226	1	RIL_MYCGE	P47328 mycoplasma
45	67	8.1	282	1	DHPS_ECOLI	P26282 escherichia

J. Immunol. 158:748-755(1997).
 [6]
 RN SEQUENCE OF 26-45.
 RP MEDLINE=90136920; PubMed=2137200;
 RX Hannum C.H., Wilcox C.J., Arend W.P., Joslin F.G., Dripps D.J.,
 RA Helmdal P.L., Ames L.G., Sommer A., Eisenberg S.P., Thompson R.C.;
 RT "Interleukin-1 receptor antagonist activity of a human interleukin-1
 inhibitor.";
 RL Nature 343:336-340(1990).
 RN [7]
 RP SEQUENCE OF 26-52.
 RX MEDLINE=90354444; PubMed=2143761;
 RA Blenkowski M.J., Eessalu T.E., Berger A.E., Truesdell S.E.,
 RA Shelly J.A., Laborde J.L., Zucher-Weegy H.A., Reardon I.M.,
 RA Heinrichson R.L., Chosay J.G., Tracey D.E.;
 RT "Purification and characterization of interleukin 1 receptor level
 antagonist proteins from THP-1 cells.";
 RL J. Biol. Chem. 265:14505-14511(1990).
 RN [8]
 RP SEQUENCE FROM N.A. (INTRACELLULAR FORM).
 RX MEDLINE=91219436; PubMed=1827201;
 RA Haskell S., Martin G., van Le L., Morris J., Peace A., Bigler C.F.,
 RA Jaffe G.J., Hammerberg C., Sporn S.A., Fong S., Arend W.P., Ralph P.;
 RT "cDNA cloning of an intracellular form of the human interleukin 1
 receptor antagonist associated with epithelium.";
 RL Proc. Natl. Acad. Sci. U.S.A. 88:3681-3685(1991).
 RN [9]
 RP STRUCTURE BY NMR.
 RX MEDLINE=92297633; PubMed=1534997;
 RA Stockman B.J., Scabill T.A., Roy M., Ulrich E.L., Strakalatis N.A.,
 RA Brunner D.P., Yem A.W., Deibel M.R. Jr.;
 RT "Secondary structure and topology of interleukin-1 receptor
 antagonist protein determined by heteronuclear three-dimensional NMR
 spectroscopy.";
 RL Biochemistry 31:5237-5244(1992).
 RN [10]
 RP STRUCTURE BY NMR.
 RX MEDLINE=94320651; PubMed=8045306;
 RA Stockman B.J., Scabill T.A., Strakalatis N.A., Brunner D.P.,
 RA Yem A.W., Deibel M.R. Jr.;
 RT "Solution structure of human interleukin-1 receptor antagonist
 protein.";
 RL FEBS Lett. 349:79-83(1994).
 RN [11]
 RP X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
 RX MEDLINE=94230368; PubMed=8175703;
 RA Vigers G.P.A., Caffes P., Evans R.J., Thompson R.C., Eisenberg S.P.,
 RA Brandhuber B.J.;
 RT "X-ray structure of interleukin-1 receptor antagonist at 2.0-A
 resolution.";
 RL J. Biol. Chem. 269:12874-12879(1994).
 RN [12]
 RP X-RAY CRYSTALLOGRAPHY (2.1 ANGSTROMS).
 RX MEDLINE=95172072; PubMed=7867645;
 RA Schneider H.A., Roudaeu J.-M., Tardif C., Soffientini A., Sarubbi E.,
 RA Akeson A., Bowlin T.L., Yanofsky S., Barrett R.W.;
 RT "Refined crystal structure of the interleukin-1 receptor antagonist.
 Presence of a disulfide link and a cis-proline.";
 RL Eur. J. Biochem. 227:838-847(1995).
 RN [13]
 RP X-RAY CRYSTALLOGRAPHY (2.7 ANGSTROMS) OF 32-177 IN COMPLEX WITH IL1R
 RX MEDLINE=97215904; PubMed=9062194;
 RA Schneider H., Tardif C., Trump-Kallmeyer S., Soffientini A.,
 RA Sarubbi E., Akeson A., Bowlin T., Yanofsky S., Barrett R.W.;
 RT "A new cytokine-receptor binding mode revealed by the crystal
 structure of the IL-1 receptor with an antagonist.";
 RL Nature 386:194-200(1997).
 CC -1- FUNCTION: IL-1RA INHIBITS THE ACTIVITY OF IL-1 BY BINDING TO ITS
 CC RECEPTOR. IL-1RA HAS NO IL-1 LIKE ACTIVITY.
 CC -1- SUBCELLULAR LOCATION: SECRETED OR INTRACELLULAR (THE VARIANT
 CC FORM).
 CC -1- ALTERNATIVE PRODUCTS: 2 ISOFORMS ARE PRODUCED BY ALTERNATIVE
 CC SPLICING.

DT 01-MAY-1992 (rel. 22, last sequence update)
 DT 01-NOV-1997 (rel. 35, last annotation update)
 DE INTERLEUKIN-1 RECEPTOR ANTAGONIST PROTEIN PRECURSOR (IL-1RA) (IL-1RN)
 DE (IRAP).
 GN IL1RN OR IL-1RA.
 OS Mus musculus (Mouse)
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=91250712; PubMed=1828262;
 RA Zahedi K., Seidlin M.F., Rits M., EzeKowitz R.A., Whitehead A.S.;
 RT "Mouse IL-1 receptor antagonist protein. Molecular characterization,
 RT gene mapping, and expression of mRNA in vitro and in vivo.";
 RL J. Immunol. 146:4228-4233(1991).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=91316273; PubMed=1830498;
 RA Matsushime H., Roussel M.F., Matsushima K., Hishinuma A., Sherr C.J.;
 RT "Cloning and expression of murine interleukin-1 receptor antagonist
 RT in macrophages stimulated by colony-stimulating factor 1.";
 RL Blood 78:616-623(1991).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC STRAIN=SWISS;
 RX MEDLINE=94271931; PubMed=8003626;
 RA Zahedi K.A., Uhlar C.M., Rits M., Prada A.E., Whitehead A.S.;
 RT "The mouse interleukin 1 receptor antagonist protein: gene structure
 RT and regulation in vitro.";
 RL Cytokine 6:1-9(1994).
 RN [4]
 RP SEQUENCE OF 7-178 FROM N.A.
 RX MEDLINE=91271363; PubMed=1828896;
 RA Eisenberg S.P., Brewer M.T., Verderber E., Heimdal P.,
 RA Brandhuber B.J., Thompson R.C.;
 RT "Interleukin 1 receptor antagonist is a member of the interleukin 1
 RT gene family: evolution of a cytokine control mechanism.";
 RL Proc. Natl. Acad. Sci. U.S.A. 88:5232-5236(1991).
 RN [5]
 RP SEQUENCE OF 23-178 FROM N.A.
 RX MEDLINE=92037824; PubMed=1844470;
 RA Shuck M.E., Bessatsu T.E., Tracey D.E., Bienkowski M.J.;
 RT "Cloning, heterologous expression and characterization of murine
 RT interleukin 1 receptor antagonist protein.";
 RL Eur. J. Immunol. 21:2775-2780(1991).
 CC -1- FUNCTION: IL-1RA INHIBITS THE ACTIVITY OF IL-1 BY BINDING TO ITS
 CC RECEPTOR. IL-1RA HAS NO IL-1 LIKE ACTIVITY.
 CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@sib-sib.ch).
 CC -----
 CC EMBL: M74294; AAA39309.1; -
 DR EMBL: M64404; AAA39277.1; -
 DR EMBL: U32838; AAA20576.1; -
 DR EMBL: M57525; AAA39278.1; -
 DR EMBL: M63100; AAA39310.1; -
 DR EMBL: S64082; AAB20265.1; -
 DR PIR: B40956; B40956.
 DR PIR: A44610; A44610.
 DR HSSP: P18510; 11RA.
 DR MGD: MGI:96547; 11lra.
 DR InterPro: IPR000975; -
 DR Pfam: PF00340; Interleukin-1; 1.
 DR PRINTS: PR00264; INTERLEUKIN1.
 DR PROSITE: PS00253; INTERLEUKIN1.
 DR PROSITE: PS00253; INTERLEUKIN1; 1.
 KW Glycoprotein; Signal.

FT SIGNAL 1 26 BY SIMILARITY.
 FT CHAIN 27 178 INTERLEUKIN-1 RECEPTOR ANTAGONIST
 FT PROTEIN.
 FT DISULFID 92 142 BY SIMILARITY.
 FT CARBOHYD 110 110 N-LINKED (GLCNAC. . .) (POTENTIAL).
 SQ SEQUENCE 178 AA; 20274 MW; 84AA002A3119C024 CRC64;
 Query Match 37.5%; Score 308.5; DB 1; Length 178;
 Best Local Similarity 48.0%; Pred. No. 6, 2e-25;
 Matches 71; Conservative 15; Mismatches 49; Indels 13; Gaps 4;
 QY 9 FRMKDALKVLYLHNNQLAGGLHACKVYKGEISVYPPNRMILDASLPYILGVGGSOCL 68
 DB 39 FRMDNNGTFYLRNQLAGYLGPNINLEKIDNP-----IDHSVFLGIHGKCLD 93
 QY 69 SCG-VQGEPLTLEPYNIMELVIGAKESSTFTTRDMGLTSSFESAAYPGWFLCTVPPA 127
 DB 94 SCARSDDIRLOLEEVNIDLSKNKEEDKRFTRFIRSEKGFSTFESACPGWFLCTTLEA 153
 QY 128 DQFRLTOLPENGWNP--ITDFYFQ 153
 DB 154 DRPSLTNPPE-----PLVTYKTFQ 176
 RESULT 3
 IL1X_PIG STANDARD; PRT; 177 AA.
 AC Q29056;
 DT 15-DEC-1998 (rel. 37, Created)
 DT 15-DEC-1998 (rel. 37, Last sequence update)
 DT 15-JUL-1999 (rel. 38, Last annotation update)
 DE INTERLEUKIN-1 RECEPTOR ANTAGONIST PROTEIN PRECURSOR (IL-1RA) (IL-1RN)
 DE (IRAP).
 GN IL1RN OR IRAP1.
 OS Sus scrofa (Pig).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Suidae; Sus.
 OX NCBI_TaxID=9823;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=CROSSBREED; TISSUE=Lung;
 RA Yin J., Murtaugh M.P.;
 RT "Characterization of IRAP in morphine treated pig.";
 RL Submitted (May-1996) to the EMBL/Genbank/DBD databases.
 CC -1- FUNCTION: IL-1RA INHIBITS THE ACTIVITY OF IL-1 BY BINDING TO ITS
 CC RECEPTOR. IL-1RA HAS NO IL-1 LIKE ACTIVITY.
 CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
 CC -----
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 CC -----
 CC EMBL: I38849; AAA99424.1; -
 DR InterPro: IPR000975; -
 DR Pfam: PF00340; Interleukin-1; 1.
 DR PRINTS: PR00264; INTERLEUKIN1.
 DR PROSITE: PS00253; INTERLEUKIN1; 1.
 KW Glycoprotein; Signal.
 FT SIGNAL 1 25 BY SIMILARITY.
 FT CHAIN 26 177 INTERLEUKIN-1 RECEPTOR ANTAGONIST
 FT PROTEIN.
 FT DISULFID 91 141 BY SIMILARITY.
 FT CARBOHYD 109 109 N-LINKED (GLCNAC. . .) (POTENTIAL).
 SQ SEQUENCE 177 AA; 20093 MW; 2114DC6119A9D5F9 CRC64;
 Query Match 37.1%; Score 305.5; DB 1; Length 177;
 Best Local Similarity 48.6%; Pred. No. 1, 3e-24;


```
RESULT 6
IL1X_RABIT
ID IL1X_RABIT STANDARD: PRT: 177 AA.
AC P26850;
DT 01-AUG-1992 (Rel. 23, Created)
DT 01-AUG-1992 (Rel. 23, Last sequence update)
DT 15-DEC-1998 (Rel. 37, Last annotation update)
DE INTERLEUKIN-1 RECEPTOR ANTAGONIST PROTEIN PRECURSOR (IL-1RA) (IL-1RN)
DE (IRAP)
GN IL1RN OR IL1RA.
OS Oryctolagus cuniculus (Rabbit).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
OX NCBI_TaxID=9986;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=94165101; PubMed=7509813;
RX Cominelli F., Bortolami M., Pizarro T.T., Monsacchi L., Ferretti M.,
RA Brewer M.T., Eisenberg S.P., Ng R.K.;
RA "Rabbit interleukin-1 receptor antagonist. Cloning, expression,
RT functional characterization, and regulation during intestinal
RT inflammation.";
RL J. Biol. Chem. 269:6962-6971(1994).
RN [2]
RP SEQUENCE FROM N.A.
RA Hamada H., Mulligan R.C.;
RL Submitted (XXX-1992) to the EMBL/Genbank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=93052512; PubMed=1427977;
RX Goto F., Goto K., Miyata T., Onkawara S., Takao T., Mori S.,
RA Furukawa S., Maeda T., Iwanaga S., Shimonishi Y., Yoshinaga M.;
RT "Interleukin-1 receptor antagonist in inflammatory exudate cells of
RT rabbits. Production, purification and determination of primary
RT structure.";
RL Immunology 77:235-244(1992).
CC -1- FUNCTION: IL-1RA INHIBITS THE ACTIVITY OF IL-1 BY BINDING TO ITS
CC RECEPTOR. IL-1RA HAS NO IL-1 LIKE ACTIVITY.
CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
CC -----
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CC or send an email to license@sib-sib.ch).
CC -----
DR EMBL; S68977; AAB30093.1; -
DR EMBL; M57526; AAA31374.1; -
DR EMBL; D21832; BAA04860.1; -
DR PIR; A54377; A54377.
DR HSSP; P18510; IL1R.
DR InterPro: IPR000975;
DR Pfam: PF00340; interleukin-1; 1.
DR PRINTS: PR00264; INTERLEUKIN1.
DR PROSITE: PS00253; INTERLEUKIN_1; 1.
KW Glycoprotein; Signal.
FT SIGNAL 1 25 BY SIMILARITY.
FT CHAIN 26 177 INTERLEUKIN-1 RECEPTOR ANTAGONIST
FT PROTEIN.
FT DISULFID 91 141 BY SIMILARITY.
FT CARBOHYD 109 109 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CONFLICT 19 19 F -> L (IN REF. 2).
SQ SEQUENCE 177 AA; 20214 MW; F5BC08F097FFFAF CRC64;
```

Query Match 34.8%; Score 286.5; DB 1; Length 177;

Best Local Similarity 45.9%; Pred. No. 1.2e-22;

Matches 68; Conservative 17; Mismatches 50; Indels 13; Gaps 4;

QY 9 FRKADSAKLVLYLHNNQLAGLHAGKVIKGEISVPPNRMIDASLSP--VILGVGGSGQ 66

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Db 38 FRIMDVNOKTFYVLRNNQLVAGYLQGPNAKLEERLDVVP-----LEPOLLFIQIRGKL 90
QY 67 CLSC-GVGOEPYTLLEPVNINMELYLGAKESKSTFFRRDMGLSSPESNAYPPWFCTYP 125
Db 91 CLSCVSGDKMKLHLAVNTTDLGKNKEODKRPFTIRNSGPTTPESASCDFWLCFTAL 150
QY 126 EADQPVRLTQLPENGGMNAPITDFYFQO 153
Db 151 EADQPVSLTTPPD---SIYTKFYFOE 175

RESULT 7
IL1X_HORSE
ID IL1X_HORSE STANDARD: PRT: 177 AA.
AC O18999; 077745.
DT 15-DEC-1998 (Rel. 37, Created)
DT 15-DEC-1998 (Rel. 37, Last sequence update)
DT 15-JUL-1999 (Rel. 38, Last annotation update)
DE INTERLEUKIN-1 RECEPTOR ANTAGONIST PROTEIN PRECURSOR (IL-1RA) (IL-1RN)
DE (IRAP).
GN IL1RN OR IL1RA.
OS Equus caballus (Horse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
OX NCBI_TaxID=9796;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=97366446; PubMed=9223227;
RX Kato H., Onishi T., Matsushiro H., Watarai T., Goitsuka R.,
RA Tsujimoto H., Hasegawa A.;
RT "Molecular cloning and functional expression of equine interleukin-1
RT receptor antagonist.";
RL Vet. Immunol. Immunopathol. 56:221-231(1997).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=98285942; PubMed=9622739;
RX Howard R.D., McIlwraith C.W., Trotter G.W., Nyborg J.K.;
RA "Cloning of equine interleukin-1 receptor antagonist and
RT determination of its full-length cDNA sequence.";
RL Am. J. Vet. Res. 59:712-716(1998).
CC -1- FUNCTION: IL-1RA INHIBITS THE ACTIVITY OF IL-1 BY BINDING TO ITS
CC RECEPTOR. IL-1RA HAS NO IL-1 LIKE ACTIVITY.
CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
CC -----
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CC or send an email to license@sib-sib.ch).
CC -----
DR EMBL; D83714; BAA22529.1; -
DR EMBL; U92482; AAC39257.1; -
DR InterPro: IPR000975;
DR Pfam: PF00340; interleukin-1; 1.
DR PRINTS: PR00264; INTERLEUKIN1.
DR PROSITE: PS00253; INTERLEUKIN_1; 1.
KW Glycoprotein; Signal.
FT SIGNAL 1 25 BY SIMILARITY.
FT CHAIN 26 177 INTERLEUKIN-1 RECEPTOR ANTAGONIST
FT PROTEIN.
FT DISULFID 91 141 BY SIMILARITY.
FT CARBOHYD 109 109 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CONFLICT 19 19 F -> L (IN REF. 2).
SQ SEQUENCE 177 AA; 20459 MW; IABC377F1FCF80B CRC64;
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Query Match

Best Local Similarity 33.2%; Score 273.5; DB 1; Length 177;

Matches 65; Conservative 18; Mismatches 52; Indels 13; Gaps 4;

QY 9 FRMKDALKVLYLHNNQILAGLHAGVKIKGEISVVPNRWLDASLP--VILGVQGSQ 66
 DB 38 FRIMDVNOKTFEYMRNNQVAGYLOESNTRKLOKIDVVP-----IEPDALFLGHRKL 90
 QY 67 CLSC-GVGOEPLTLEPYNIMELYGAKESKSFTEYRRDMGLTSSFESAAYPGWFLCTVPL 125
 DB 91 CLACVKSGBEIRFQLEAVNITDLSKNKEKRFETIRSNSGFTSFESACPGWFLCTQ 150
 QY 126 EADQPVRLTQLPENGGMNAPITDFYFOQ 153
 DB 151 EADRPVSLTNKPKR---SFMVTKFYLQE 175

RESULT 8
 IL1B_SHEEP STANDARD: PRT: 266 AA.
 ID P21621:
 DT 01-MAY-1991 (Rel. 18, Created)
 DT 01-MAR-1992 (Rel. 21, Last sequence update)
 DT 30-MAY-2000 (Rel. 39, Last annotation update)
 DE INTERLEUKIN-1 BETA PRECURSOR (IL-1 BETA).
 GN IL1B.
 OS Ovis aries (Sheep).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Caprinae; Ovis.
 OX NCBI_TaxID=9940;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=92119335; PubMed=1840515;
 RA Seow H.F., Rothe J.S., David M.U., Wood P.R.:
 RT "Nucleotide sequence of ovine macrophage interleukin-1 beta cDNA."
 RL DNA Seq. 1:423-426(1991).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=91088326; PubMed=2263490;
 RA Fiskerstrand C., Sargan D.:
 RT "Nucleotide sequence of ovine interleukin-1 beta."
 RL Nucleic Acids Res. 18:7165-7165(1990).
 CC -1- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
 CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL
 CC MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.
 CC IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
 CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
 CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS.
 CC -1- SUBUNIT: MONOMER.
 CC -1- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
 CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
 CC -1- MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
 CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
 CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
 CC SECRETORY PROTEINS.
 CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
 CC -----
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 CC -----
 DR EMBL, X54796; CA38566.1; -
 DR EMBL, X56972; CAA40293.1; -
 DR PIR, S13092; S13092.
 DR PIR, S13810; S13810.
 DR PIR, S23010; S23010.
 DR HSSP, P01584; 411B.
 DR InterPro, IPR000975; -
 DR InterPro, IPR002348; -
 DR Pfam, PF00340; interleukin-1; 1.
 DR PRINTS, PRO0262; IL1BGF.
 DR PRINTS, PRO0264; INTERLEUKIN1.

DR PROSITE, PS00253; INTERLEUKIN_1; 1.
 KW Cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen.
 FT PROPEP 1 113
 FT CHAIN 114 266 INTERLEUKIN-1 BETA.
 FT CONFLICT 14 14 Y->C (IN REF. 2).
 FT CONFLICT 55 55 Q->K (IN REF. 2).
 FT CONFLICT 64 64 P->A (IN REF. 2).
 FT CONFLICT 145 145 V->L (IN REF. 2).
 SQ SEQUENCE 266 AA; 30717 MW; BDED07B58224AB78 CRC64;
 Query Match 17.2%; Score 141.5; DB 1; Length 266;
 Best Local Similarity 31.9%; Pred. No. 2e-07;
 Matches 43; Conservative 23; Mismatches 54; Indels 15; Gaps 5;
 QY 16 LKVLVHNNQILAGLHAGVKIKGEISVVPNRWLDASLPVILGVQGSQCLSC-GVGO 74
 DB 139 LKALHLPQDEMRREVFPCKSFYQGEERD-----NKIPVALGIRKRLYLSCVKKGD 189
 QY 75 EPTLTLEPYNIMELYGAKESKSFTEYRRDMGLTSSFESAAYPGWFLCTVPEADQPVRLT 134
 DB 190 TPTLQLEVD-PKVPKRMKRFVFKTEIKNVFESVLYPNMYISTQIEKPVPLG 248
 QY 135 QLPENGGMNAPITDF 149
 DB 249 RF--RGGD--ITDF 259

RESULT 9
 IL1B_CEREL STANDARD: PRT: 266 AA.
 ID P51745:
 DT 01-OCT-1996 (Rel. 34, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)
 DT 30-MAY-2000 (Rel. 39, Last annotation update)
 DE INTERLEUKIN-1 BETA PRECURSOR (IL-1 BETA).
 GN IL1B.
 OS Cervus elaphus (Red deer).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
 OC Cervidae; Cervinae; Cervus.
 OX NCBI_TaxID=9860;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Lockhart E.A.:
 RL Submitted (MAR-1995) to the EMBL/Genbank/DBJ databases.
 CC -1- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
 CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL
 CC MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.
 CC IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
 CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
 CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS.
 CC -1- SUBUNIT: MONOMER.
 CC -1- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
 CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
 CC -1- MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
 CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
 CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
 CC SECRETORY PROTEINS.
 CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
 CC -----
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 CC -----
 DR EMBL, U20500; AA62234.1; -
 DR HSSP, P01584; 411B.
 DR InterPro, IPR000975; -
 DR InterPro, IPR002348; -

DR Pfam: PF00340; interleukin-1; 1.
 DR PRINTS; PR00262; IL1HGF.
 DR PRINTS; PR00264; INTERLEUKIN1.
 DR PROSITE; PS00253; INTERLEUKIN_1; 1.
 KW cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen.
 FT PROPEP 1 113 BY SIMILARITY.
 FT CHAIN 114 266 INTERLEUKIN-1 BETA.
 SQ SEQUENCE 266 AA; 30629 MW; 4F40BAE6FD09F060 CRC64;

Query Match 17.1%; Score 140.5; DB 1; Length 266;
 Best Local Similarity 31.9%; Pred No. 2.6e-07;
 Matches 43; Conservative 22; Mismatches 53; Indels 15; Gaps 5;

DB 139 LKALHLLSQSMREVEVFCMSFVQGEERD-----NKIPVAGIGIKDNLKLYSCVKKGD 189
 QY 16 LKVLVYHNNQLAGLHAGKVKIGELISVPPNRWLDASLPVLIGVQGSQCLSC-GVQ 74
 DR PRINTS; PR00262; IL1HGF.
 DR PROSITE; PS00264; INTERLEUKIN1.
 KW cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen.
 FT PROPEP 1 113 BY SIMILARITY.
 FT CHAIN 114 266 INTERLEUKIN-1 BETA.
 SQ SEQUENCE 266 AA; 30774 MW; 9D1EF8E57070586 CRC64;

DB 135 QLPENGGMNAPITDF 149
 QY 135 QLPENGGMNAPITDF 149
 DB 249 HF--RGGD--ITDF 259

RESULT 10
 IL1B_BOVIN STANDARD; PRT; 266 AA.
 AC P09428;
 DT 01-MAR-1989 (rel. 10, Created)
 DT 01-MAR-1989 (rel. 10, Last sequence update)
 DT 30-MAY-2000 (rel. 39, Last annotation update)
 DE INTERLEUKIN-1 BETA PRECURSOR (IL-1 BETA).
 GN IL1B.
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Bovinae; Bos.
 OX NCBI_Taxid=9913;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=89016591; PubMed=3262866;
 RA Leong S.R., Flagg G.M., Lawman M., Gray P.W.;
 RT "The nucleotide sequence for the cDNA of bovine interleukin-1 beta.";
 RL Nucleic Acids Res. 16:9054-9054(1988).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=88318652; PubMed=3261832;
 RA Maliszewski C.R., Baker P.E., Schoenborn M.A., Davis B.S., Cosman D.,
 RA Gillis S., Cerretti D.P.;
 RT "Cloning, sequence and expression of bovine interleukin 1 alpha and
 RT interleukin 1 beta complementary DNAs.";
 RL Mol. Immunol. 25:429-437(1988).
 CC -1- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
 CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL
 CC MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.
 CC IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
 CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
 CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS.
 CC -1- SUBUNIT: MONOMER.
 CC -1- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
 CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
 CC -1- MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
 CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
 CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
 CC SECRETORY PROTEINS.
 CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
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 CC -----

DR EMBL; M35569; AAA30585.1; -;
 DR EMBL; X12498; CAA31018.1; -;
 DR EMBL; M37211; AAA30584.1; -;
 DR PIR; J10010; ICBO1B.
 DR PIR; S01380; S01380.
 DR HSSP; P01584; 1H1B.
 DR InterPro; IPR000975; -;
 DR InterPro; IPR002348; -;
 DR Pfam; PF00340; interleukin-1; 1.
 DR PRINTS; PR00262; IL1HGF.
 DR PROSITE; PS00264; INTERLEUKIN1.
 DR PROSITE; PS00253; INTERLEUKIN_1; 1.
 KW cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen.
 FT PROPEP 1 113 BY SIMILARITY.
 FT CHAIN 114 266 INTERLEUKIN-1 BETA.
 FT CONFLICT 252 A -> G (IN REF. 2).
 SQ SEQUENCE 266 AA; 30774 MW; 9D1EF8E57070586 CRC64;

Query Match 16.5%; Score 135.5; DB 1; Length 266;
 Best Local Similarity 31.4%; Pred. No. 8.5e-07;
 Matches 43; Conservative 22; Mismatches 53; Indels 19; Gaps 5;

DB 139 LKALHLLSQSMREVEVFCMSFVQGEERD-----NKIPVAGIGIKDNLKLYSCVKKGD 189
 QY 16 LKVLVYHNNQLAGLHAGKVKIGELISVPPNRWLDASLPVLIGVQGSQCLSC-GVQ 74
 DR PRINTS; PR00262; IL1HGF.
 DR PROSITE; PS00264; INTERLEUKIN1.
 KW cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen.
 FT PROPEP 1 113 BY SIMILARITY.
 FT CHAIN 114 266 INTERLEUKIN-1 BETA.
 SQ SEQUENCE 266 AA; 30774 MW; 9D1EF8E57070586 CRC64;

DB 135 QLPENGGMNAPITDF 149
 QY 135 QLPENGGMNAPITDF 149
 DB 248 -----GHFRAGQDITDF 259

RESULT 11
 IL1B_HORSE STANDARD; PRT; 268 AA.
 AC Q28386; Q77744; 018995;
 DT 15-DEC-1998 (rel. 37, Created)
 DT 15-DEC-1998 (rel. 37, Last sequence update)
 DT 30-MAY-2000 (rel. 39, Last annotation update)
 DE INTERLEUKIN-1 BETA PRECURSOR (IL-1 BETA).
 GN IL1B.
 OS Equus caballus (Horse).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
 OX NCBI_Taxid=9796;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=96131982; PubMed=8578682;
 RA Kato H., Ohashi T., Nakamura N., Nishimura Y., Watari T., Goltsuka R.,
 RA Tsujimoto H., Hasegawa A.;
 RT "Molecular cloning of equine interleukin-1 alpha and -beta cDNAs";
 RT Vet. Immunol. Immunopathol. 48:221-231(1995).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=9622738; PubMed=9622738;
 RA Howard R.D., McIlwraith C.W., Trotter G.W., Nyborg J.K.;
 RT "Cloning of equine interleukin-1 alpha and equine interleukin-1 beta
 RT and determination of their full-length cDNA sequences.";
 RL Am. J. Vet. Res. 59:704-711(1998).
 RN [3]
 RP SEQUENCE FROM N.A. (SHORT FORM).
 RX MEDLINE=97080493; PubMed=8921838;
 RA Kato H., Yon H.Y., Ohashi T., Watari T., Goltsuka R., Tsujimoto H.,
 RA Hasegawa A.;

```

RT Identification of an alternatively spliced transcript of equine
RT Interleukin-1 beta.
CC Gene 177:11-16(1996).
CC -1- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL
CC MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.
CC IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS
CC (BY SIMILARITY).
CC -1- SUBUNIT: MONOMER (BY SIMILARITY).
CC -1- ALTERNATIVE PRODUCTS: TWO FORMS ARE PRODUCED BY ALTERNATIVE
CC SPLICING.
CC -1- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
CC -1- MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
CC SECRETORY PROTEINS.
CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: D42147; BAA07718.1; -
DR EMBL: U92481; AAC39256.1; -
DR EMBL: D42165; BAA22528.1; -
DR InterPro: IPR000975; -
DR InterPro: IPR002348; -
DR Pfam: PF00340; Interleukin-1; 1.
DR PRINTS: PR00262; IL1HBGF.
DR PROSITE: PS00264; INTERLEUKIN_1.
DR PROSITE: PS00253; INTERLEUKIN_1; 1.
KW Cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen;
KW Alternative splicing.
FT PROPEP 1 115 BY SIMILARITY.
FT CHAIN 116 268 INTERLEUKIN-1 BETA.
FT VARSPIC 101 154 MISSING (IN SHORT ISOBORN).
FT CONFLICT 45 45 D -> N (IN REF. 2).
FT CONFLICT 55 55 H -> Q (IN REF. 2).
FT CONFLICT 64 65 AM -> VV (IN REF. 2).
FT CONFLICT 71 71 V -> M (IN REF. 2).
FT CONFLICT 110 111 EG -> DD (IN REF. 2).
FT CONFLICT 118 118 M -> V (IN REF. 2).
FT CONFLICT 245 245 S -> K (IN REF. 2).
SQ SEQUENCE 268 AA; 30268 MW; 336F27792A1542EA CRC64;

Query Match 16.0%; Score 132; DB 1; Length 268;
Best Local Similarity 30.1%; Pred. No. 2e-06;
Matches 46; Conservative 21; Mismatches 64; Indels 22; Gaps 6;

QY 1 MWLSCALCFRMDALKLYLHNNQLAGLHAGVKIKGEISVYPRNWDASLSPVILG 60
DB 133 LVLSSG-----CELQAVHNGENNTNQVFMQSFVQGE-----ETDKIPVALG 176
QY 61 VGGSCGLSCGAGQ-EPITLLEPVNIMELYLGAKESKSTFFRRDGLTSFESAAYPMW 119
DB 177 LKEKNLYLSCGKDGKPTQLQLETVD--PNITYPKRKMEKRFVFMKELGNVEESAMYPWM 235
QY 120 FLCTVPEADQVRLQLPENGGMNAPITDFEFO 152
DB 236 YISTSOAKESPVLGN--TRGG--RDITDFIME 264

RESULT 12
IL1B_CAPHI STANDARD; PRT; 266 AA.
IL1B_CAPHI

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AC P79162;
DR 15-DEC-1998 (Rel. 37, Created)
DR 15-DEC-1998 (Rel. 37, Last sequence update)
DR 30-MAY-2000 (Rel. 39, Last annotation update)
DE INTERLEUKIN-1 BETA PRECURSOR (IL-1 BETA).
GN IL1B.
OS Capra hircus (Goat).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Caprinae; Capra.
OX NCBI_TaxID=9925;
RN [1]
RP SEQUENCE FROM N.A.
RA Takakura H., Hashimoto O., Mori Y., Tatsumi M.;
RT "Molecular cloning and expression of caprine IL-1alpha and
RT IL-1beta."
CC Submitted (JUN-1995) to the EMBL/Genbank/DBJ databases.
CC -1- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL
CC MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.
CC IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS
CC (BY SIMILARITY).
CC -1- SUBUNIT: MONOMER (BY SIMILARITY).
CC -1- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
CC -1- MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
CC SECRETORY PROTEINS.
CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: D63351; BAA09675.1; -
DR InterPro: IPR000975; -
DR InterPro: IPR002348; -
DR Pfam: PF00340; Interleukin-1; 1.
DR PRINTS: PR00262; IL1HBGF.
DR PRINTS: PR00264; INTERLEUKIN_1.
DR PROSITE: PS00253; INTERLEUKIN_1; 1.
KW Cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen.
FT PROPEP 1 113 BY SIMILARITY.
FT CHAIN 114 266 INTERLEUKIN-1 BETA.
SQ SEQUENCE 266 AA; 30769 MW; 59F7B39BD1D4DDA5 CRC64;

Query Match 15.7%; Score 129.5; DB 1; Length 266;
Best Local Similarity 31.1%; Pred. No. 3.5e-06;
Matches 42; Conservative 22; Mismatches 56; Indels 15; Gaps 5;

QY 16 LKVLVYHNNQLAGLHAGVKIKGEISVYPRNWDASLSPVILGSGGSLSC-CGVQ 74
DB 139 LKALHLHLSQEMREVFYFCGFSFVQGEERD-----KNIPALGIRKDKNLYLSWKKG 189
QY 75 EPTLLEPVNIMELYLGAKESKSTFFRRDGLTSFESAAYPGFLCTVPEADQVRLT 134
DB 190 TPTQLQLEVD--PKVYPKRKMEKRFVYKTEIKNVEFSLVLPNMYISTSQLEKRPVLG 248
QY 135 QLPENGGMNAPITDF 149
DB 249 HF--RGGD--ITDF 259

RESULT 13
IL1B_PIG

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ID IL1B_PIG STANDARD: PRT: 267 AA.
AC P26889;
DT 01-AUG-1992 (Rel. 23, Created)
DT 01-AUG-1992 (Rel. 23, Last annotation update)
DT 30-MAY-2000 (Rel. 39, Last annotation update)
DE INTERLEUKIN-1 BETA PRECURSOR (IL-1 BETA).
GN IL1B.
OS Sus scrofa (Pig).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX NCBI_TaxID=9823;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=93314975; PubMed=8325511;
RA Huether M.J., Lin G., Smith D.M., Murtaugh M.P., Mollitor T.W.;
RT "Cloning, sequencing and regulation of an mRNA encoding porcine
interleukin-1 beta."
RL Gene 129:285-289(1993).
CC -1- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL
CC MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.
CC IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS.
CC -1- SUBUNIT: MONOMER.
CC -1- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
CC MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
CC SECRETORY PROTEINS.
CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: M86725; AAA02584.1; -
DR PIR: JN0724; JN0724.
DR HSSP: P01584; I1IB.
DR InterPro: IPR000975; -
DR pfam: PF00340; interleukin-1; 1.
DR PRINTS: PR00262; IL1HGF.
DR PRINTS: PR00264; INTERLEUKIN1.
DR PROSITE: PS00253; INTERLEUKIN_1; 1.
DR CYTOKINE; Macrophage; Mitogen; Inflammatory response; Pyrogen.
FT PROPEP 115 267
FT CHAIN 115 267
FT SEQUENCE 267 AA; 30404 MW; 7F6B92B784D5086F CRC64;
SO
Query Match 15.7%; Score 129; DB 1; Length 267;
Best Local Similarity 28.7%; Pred. No. 4e-06;
Matches 43; Conservative 23; Mismatches 62; Indels 22; Gaps 5;

RESULT 14
ID IL1B_MACMU STANDARD: PRT: 269 AA.
AC P48050;
DT 01-FEB-1996 (Rel. 33, Created)
DT 01-FEB-1996 (Rel. 33, Last sequence update)
DT 15-DEC-1998 (Rel. 37, Last annotation update)
DE INTERLEUKIN-1 BETA PRECURSOR (IL-1 BETA).
GN IL1B.
OS Macaca mulatta (Rhesus macaque).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Macaca.
OX NCBI_TaxID=9544;
RN [1]
RP SEQUENCE FROM N.A.
RX TISSUE=Blood;
RX MEDLINE=96003435; PubMed=7561102;
RA Villinger F.J., Brar S.S., Mayne A.E., Chikkala N., Ansari A.A.;
RT "Comparative sequence analysis of cytokine genes from human and
nonhuman primates."
RL J. Immunol. 155:3946-3954(1995).
CC -1- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES, IL-1 STIMULATES
CC THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL
CC MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.
CC IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING
CC IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE
CC THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS.
CC -1- SUBUNIT: MONOMER.
CC -1- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE
CC AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.
CC MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE
CC PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS
CC OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER
CC SECRETORY PROTEINS.
CC -1- SIMILARITY: BELONGS TO THE IL-1 FAMILY.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U19845; AAA86709.1; -
DR HSSP: P01584; I1IB.
DR InterPro: IPR000975; -
DR pfam: PF00340; interleukin-1; 1.
DR PRINTS: PR00262; IL1HGF.
DR PRINTS: PR00264; INTERLEUKIN1.
DR PROSITE: PS00253; INTERLEUKIN_1; 1.
DR CYTOKINE; Macrophage; Mitogen; Inflammatory response; Pyrogen.
FT PROPEP 117 269
FT CHAIN 117 269
FT SEQUENCE 269 AA; 30481 MW; A7CD59EBAC120BC7 CRC64;
SO
Query Match 15.4%; Score 127; DB 1; Length 269;
Best Local Similarity 29.7%; Pred. No. 6.5e-06;
Matches 46; Conservative 22; Mismatches 61; Indels 26; Gaps 6;

QY 1 MVISGALCFRMDALKVLYLHNNOLLAGLAGKVIKGEISVVRNRLDASLSVYILG 60
DB 132 LVLAG-----PMLKALHLITGLDKREVYFCMSFVQGDSDN-----NKIPVTLG 175
QY 61 VOGGSQCLSGV-GQEPPTLLEPVNIMELYLGAKESKSTFYRRDGLTSSPFSAYPCW 119
DB 176 IKKKNLYLSCVLMKDMPTQLQLEDID-PKRPYKMDMEKRFVFKTEIKNRVEFSALYPMW 234
QY 120 FLCTPEADQPVRLTQLPENGGMNAPITDF 149
DB 235 YISTQAQKQPVFL-----GNSKGRDITDF 260

QY 1 MVISGALCFRMDALKVLYLHNNOLLAGLAGKVIKGEISVVRNRLDASLSVYILG 60
DB 134 LVNSGPR-----ELKALHLOGDLEQGVFSMSFVQGEESN-----DKIPVALG 177
QY 61 VOGGSQCLSGV-GQEPPTLLEPVNIMELYLGAKESKSTFYRRDGLTSSPFSAYPCW 119
DB 178 IKAKNLYLSCVLMKDKDPTQLQLESVD-PKNYPRKKMKRKFVFNKIEINNNLERSAQFPWM 236
QY 120 FLCTPEADQPVRLTQLPENGGMNA--PTTDFYEQ 152

Db 237 YISTSQAESMPVFL-----GGTRGGQDITDFTMQ 265

RESULT 15

IL1B_MACFA STANDARD: PRT: 268 AA.

AC P79182:

DR 15-JUL-1998 (Rel. 36, Created)

DR 15-JUL-1998 (Rel. 36, Last sequence update)

DR 15-DEC-1998 (Rel. 37, Last annotation update)

DE INTERLEUKIN-1 BETA PRECURSOR (IL-1 BETA).

IL1B.

Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;

OC Cercopithecinae; Macaca.

OX NCBI_TaxID=9541;

RP [1]

RP SEQUENCE FROM N.A.

RC TISSUE=Thymus;

RA Totsuka K., Takakura H., Hashimoto O., Tatsumi M.;

RL Submitted (JUL-1995) to the EMBL/GenBank/DBJ databases.

-I- FUNCTION: PRODUCED BY ACTIVATED MACROPHAGES. IL-1 STIMULATES

THYMOCYTE PROLIFERATION BY INDUCING IL-2 RELEASE, B-CELL

MATURATION & PROLIFERATION, & FIBROBLAST GROWTH FACTOR ACTIVITY.

IL-1 PROTEINS ARE INVOLVED IN THE INFLAMMATORY RESPONSE, BEING

IDENTIFIED AS ENDOGENOUS PYROGENS, AND ARE REPORTED TO STIMULATE

THE RELEASE OF PROSTAGLANDIN AND COLLAGENASE FROM SYNOVIAL CELLS.

-I- SUBUNIT: MONOMER.

-I- DOMAIN: THE SIMILARITY AMONG THE IL-1 PRECURSORS SUGGESTS THAT THE

AMINO ENDS OF THESE PROTEINS SERVE SOME AS YET UNDEFINED FUNCTION.

-I- MISCELLANEOUS: THE LACK OF A SPECIFIC HYDROPHOBIC SEGMENT IN THE

PRECURSOR SEQUENCE SUGGESTS THAT IL-1 IS RELEASED BY DAMAGED CELLS

OR IS SECRETED BY A MECHANISM DIFFERING FROM THAT USED FOR OTHER

SECRETORY PROTEINS.

-I- SIMILARITY: BELONGS TO THE IL-1 FAMILY.

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CC -----

CC EMBL; D63353; BAA09677.1; -

DR HSSP; P01584; IHTB.

DR InterPro: IPR000975; -

DR InterPro: IPR002348; -

DR Pfam; PF00340; Interleukin-1; 1.

DR PRINTS; PR00262; IL1HGF.

DR PRINTS; PR00264; INTERLEUKIN1.

DR PROSITE; PS00253; INTERLEUKIN_1; 1.

KM Cytokine; Macrophage; Mitogen; Inflammatory response; Pyrogen.

FT PROPEP 1 116 BY SIMILARITY

FT CHAIN 117 268 INTERLEUKIN-1 BETA.

SEQUENCE 268 AA; 30425 MW; CFB726E3E2C05B4 CRC64;

Query Match 15.3%; Score 126; DB 1; Length 268;

Best Local Similarity 29.7%; Pred. No. 8.2e-06;

Matches 46; Conservative 21; Mismatches 62; Indels 26; Gaps 6;

OY 1 NVLSGALCFRMKDSALKVLYLNHNNLLAGLHAGKVIKGEELISVYPNRLDASLSPVILG 60

DB 134 LVMSGPRY-----ELKALHLGGDLEQQVVFMSMFVGEESN-----DKIPVALG 177

OY 61 VGGSGQCLSCGV-GQEPITLTPVNIEMELYLAKESKSTFYRRDMGLTSFESAAYPGW 119

DB 178 LKAKMLYLSGVKLDKDKPTLTLQESVD-PKNYPRKKMEKRFVFNKIEINNKLEFESAQFPNW 236

OY 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

DB 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

OY 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

DB 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

OY 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

DB 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

OY 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

DB 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

OY 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

DB 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

OY 120 FLCTVPEADQPVRLTQLPENGGMNA--PLTDFYFQ 152

SEQUENCE FROM N.A.
 MEDLINE=20322477; PubMed=10866108;
 Mulero J.J., Nelken S.T., Ford J.E.;
 "Organization of the Human Interleukin-1 Receptor Antagonist Gene
 IL1HL1.";
 Immunogenetics 51:425-428(2000).
 (6)
 SEQUENCE FROM N.A.
 Debets R., Timans J.C., Zurawski S., Sana T.R., Bazan F.,
 Kastellein R.A.;
 "Novel IL-1 ligands IL-1d and IL-1e use IL-1R related protein 2.";
 Submitted (FEB-2000) to the EMBL/Genbank/DBJ databases.
 EMBL: AF201830; AAF25210.1;
 EMBL: AF186094; AAF02757.1;
 EMBL: AJ242737; CAB59822.1;
 EMBL: AJ242738; CAB59823.1;
 EMBL: AJ271338; CAB67704.1;
 EMBL: AF216693; AAF76981.1;
 EMBL: AF230377; AAF91274.1;
 HSP: P18510; IL1R.
 InterPro: IPR000975;
 Pfam: PF00340; IL1; 1.
 PRINTS: PR00264; INTERLEUKIN1.
 PROSITE: PS00253; INTERLEUKIN_1; UNKNOWN_1.
 SMART: SM00125; IL1; 1.
 SMART: SM00125; IL1; 1.
 SEQUENCE 155 AA; 16962 MW; B96DB5EFA2612E25 CRC64;
 KW Receptor.
 SO

Query Match 100.0%; Score 823; DB 4; Length 155;
 Best Local Similarity 100.0%; Pred. No. 3.3e-76;
 Matches 155; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MYSGALCFRMDALKLYLHNNOLLAGGLHAGKYIKGEETISVVPNRDLASLSPVILG 60
 DB 1 MYSGALCFRMDALKLYLHNNOLLAGGLHAGKYIKGEETISVVPNRDLASLSPVILG 60
 QY 61 VOGSGCSCGCGOEPPTLLEPVNIMELYLGAKESKSFYFRDGLTSSFSAAYPGWF 120
 DB 61 VOGSGCSCGCGOEPPTLLEPVNIMELYLGAKESKSFYFRDGLTSSFSAAYPGWF 120
 QY 121 LCTVPEADQPVRLTQLPENGWNPATPTDFYFOOCD 155
 DB 121 LCTVPEADQPVRLTQLPENGWNPATPTDFYFOOCD 155
 DB 121 LCTVPEADQPVRLTQLPENGWNPATPTDFYFOOCD 155

RESULT 2
 Q9QYI1 PRELIMINARY; PRT; 155 AA.
 AC Q9QYI1;
 DT 01-MAY-2000 (TREMblrel. 13, Created)
 DT 01-MAY-2000 (TREMblrel. 13, last sequence update)
 DT 01-MAR-2001 (TREMblrel. 16, last annotation update)
 DE IL-1LI PROTEIN (INTERLEUKIN-1 HOMOLOG 3).
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Barton J.L., Nicklin M.J.H.;
 "IL-1LI: A Novel Member of the Interleukin-1 Gene Family is Expressed
 in Trophoblasts and Macrophages.";
 Submitted (OCT-1999) to the EMBL/Genbank/DBJ databases.
 RN [2]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=20209405; PubMed=10744718;
 Kumar S., McDonnell P.C., Lehr R., Tierney L., Tzimas M.N.,
 Grissold D.E., Capper E.A., Tal-Singer R., Wells G.I., Doyle M.L.,
 Young P.R.;
 "Identification and initial characterization of four novel members of
 the interleukin-1 family.";
 J. Biol. Chem. 275:10308-10314(2000).
 RT

EMBL: AJ250429; CAB59831.1;
 DR EMBL: AF200495; AAF69251.1;
 DR HSP: P18510; IL1R.
 DR InterPro: IPR000975;
 DR Pfam: PF00340; IL1; 1.
 DR PRINTS: PR00264; INTERLEUKIN1.
 DR PROSITE: PS00253; INTERLEUKIN_1; 1.
 DR SMART: SM00125; IL1; 1.
 SEQUENCE 155 AA; 17004 MW; AAH1770F2E12533A CRC64;
 KW Receptor.
 SO

Query Match 89.2%; Score 734; DB 11; Length 155;
 Best Local Similarity 91.0%; Pred. No. 3.8e-67;
 Matches 141; Conservative 4; Mismatches 10; Indels 0; Gaps 0;

QY 1 MYSGALCFRMDALKLYLHNNOLLAGGLHAGKYIKGEETISVVPNRDLASLSPVILG 60
 DB 1 MYSGALCFRMDALKLYLHNNOLLAGGLHAGKYIKGEETISVVPNRDLASLSPVILG 60
 QY 61 VOGSGCSCGCGOEPPTLLEPVNIMELYLGAKESKSFYFRDGLTSSFSAAYPGWF 120
 DB 61 VOGSGCSCGCGOEPPTLLEPVNIMELYLGAKESKSFYFRDGLTSSFSAAYPGWF 120
 QY 121 LCTVPEADQPVRLTQLPENGWNPATPTDFYFOOCD 155
 DB 121 LCTVPEADQPVRLTQLPENGWNPATPTDFYFOOCD 155
 DB 121 LCTVPEADQPVRLTQLPENGWNPATPTDFYFOOCD 155

RESULT 3
 Q9JIG2 PRELIMINARY; PRT; 156 AA.
 AC Q9JIG2;
 DT 01-OCT-2000 (TREMblrel. 15, Created)
 DT 01-OCT-2000 (TREMblrel. 15, last sequence update)
 DT 01-MAR-2001 (TREMblrel. 16, last annotation update)
 DE INTERLEUKIN-1 DELTA.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Debets R., Timans J.C., Zurawski S., Sana T.R., Bazan F.,
 Kastellein R.A.;
 "Novel IL-1 ligands IL-1d and IL-1e use IL-1R related protein 2.";
 Submitted (FEB-2000) to the EMBL/Genbank/DBJ databases.
 DR EMBL: AF230378; AAF91275.1;
 DR InterPro: IPR000975;
 DR Pfam: PF00340; IL1; 1.
 DR PRINTS: PR00264; INTERLEUKIN1.
 DR PROSITE: PS00253; INTERLEUKIN_1; 1.
 DR SMART: SM00125; IL1; 1.
 SEQUENCE 156 AA; 17136 MW; AAD1EB2F93CF77A7 CRC64;
 KW Receptor.
 SO

Query Match 89.2%; Score 734; DB 11; Length 156;
 Best Local Similarity 91.0%; Pred. No. 3.8e-67;
 Matches 141; Conservative 4; Mismatches 10; Indels 0; Gaps 0;

QY 1 MYSGALCFRMDALKLYLHNNOLLAGGLHAGKYIKGEETISVVPNRDLASLSPVILG 60
 DB 2 MYSGALCFRMDALKLYLHNNOLLAGGLHAGKYIKGEETISVVPNRDLASLSPVILG 61
 QY 61 VOGSGCSCGCGOEPPTLLEPVNIMELYLGAKESKSFYFRDGLTSSFSAAYPGWF 120
 DB 61 VOGSGCSCGCGOEPPTLLEPVNIMELYLGAKESKSFYFRDGLTSSFSAAYPGWF 121
 QY 121 LCTVPEADQPVRLTQLPENGWNPATPTDFYFOOCD 155
 DB 122 LCTVPEADQPVRLTQLPENGWNPATPTDFYFOOCD 156

RESULT 4


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QY      9 FRMKDSALKVYLHNNOAGLHAGKYKGEIEISVPNRMWDASLPYILGVGGSGL 68
DB      20 FRIWTONRKFTFLRNNOAGLYLGOGPNIKLEEKIDMVP-----IDLHSVFLGIHGKLCL 74
OY      69 SCG-VGOEPTLTPEPNIEMELYAKESKSFFEFYRRDMLTSSFSESAAPGMFICTVPEA 127
DB      75 SCAKSGDDIOLKELEVNTITDLSNKKEDKRFFFIINSEKPFTTSFEBAACPGMFICTTLEA 134
OY      128 DQPVRILTQLPENGGWNAP--ITDFPYFOQ 153
DB      135 DRPVSLTMTPEE----PLIVTKFYFOE 157

RESULT   7
O9GNMZ4 PRELIMINARY; PRT; 177 AA.
O9GNMZ4
AC O9GNMZ4;
DT 01-MAR-2001 (TREMBLrel. 16, Created)
DT 01-MAR-2001 (TREMBLrel. 16, Last sequence update)
DT 01-MAR-2001 (TREMBLrel. 16, last annotation update)
DE INTERLEUKIN-1 RECEPTOR ANTAGONIST.
GN IL-1RA.
OS Tursiops truncatus (Atlantic bottle-nosed dolphin).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Cetacea; Odontoceti; Delphinidae; Tursiops.
OX NCBI_TaxID=9739;
RX (1)
RP SEQUENCE FROM N.A.
RA Inoue Y., Itou T., Sakai T.;
RT "Cloning and Sequencing of a Bottle-Nosed Dolphin Interleukin-1 Receptor Antagonist ";
RL Submitted (Feb-2000) to the EMBL/Genbank/DDBJ databases.
DR EMBL; AB038268; BAB11806.1; -.
KW Receptor.
SQ SEQUENCE 177 AA; 19923 MW; 6FD19A0C09B131B CRC64;

Query Match          37 1%; Score 305.5; DB 6; Length 177;
Best Local Similarity 48.0%; Pred.No.1.9e-23;
Matches 71; Conservative 13; Mismatches 51; Indels 13; Gaps

QY      9 FRMKDSALKVYLHNNOAGLHAGKYKGEIEISVPNRMWDASLSP--VLIGVGGSQ 66
DB      38 FRIWYNQNCKTFELRNNNQLVAYLGOPNFMLEEKIDVP-----IERAMFLGIHGKTL 90
OY      67 CLSC-GVGOEPFLTTEPINIMELEYAKESKSKFTTYRRDMGLTSSFESAAYPMGFICTYP 125
DB      91 CIACKVSGBEIKTGLEPNVINTDLSNKREDKRFATFRSDSPTTSFEASAACPWFICTAL 150
OY      126 EADDPVRTQLPENGGMNAPIITDFPFQQ 153
DB      151 ETDPDVGLTNTPODA---VOVKTFYFOE 175

RESULT   8
O9GKKZ PRELIMINARY; PRT; 176 AA.
O9GKKZ
AC O9GKKZ;
DT 01-MAR-2001 (TREMBLrel. 16, Created)
DT 01-MAR-2001 (TREMBLrel. 16, Last sequence update)
DT 01-MAR-2001 (TREMBLrel. 16, last annotation update)
DE INTERLEUKIN-1 RECEPTOR ANTAGONIST.
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RX (1)
RP SEQUENCE FROM N.A.
RA Campbell S.E., Nasir L., Argyie D.J., Gault E., Bennett D.;
RT "Canine IL-1 Receptor Antagonist cDNA Sequence.";
RL Submitted (DEC-1999) to the EMBL/Genbank/DDBJ databases.
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DR EMBL: AF216526; AAC36777.1; -.
KW Receptor
SQ SEQUENCE 176 AA; 19938 MW; 8486CA54a2542068 CRC64;

Query Match
Best Local Similarity 34.2%; Score 281.5; DB 6; Length 176;
Matches 68; Conservative 13; Mismatches 54; Indels 13; Gaps 4;

OY 9 FRMKRSALKVLIYLNHNNLLAGGLGKLGKAYIKGEISVYPRKMLDASLSP--VLGVQGGSQ 66
Db 38 FRIMVYNOKTFELRNNOVLAVGLGSSNTRKLEKLVVP-----VEPRAVFLGIHGRL 90
OY 67 CLSC-GVGOEPTLTLEPNINMELYLGAKESKSTFYRRDMGLTSSFSESAAYGWFCTVP 125
Db 91 CLACVKSDDERFLQLEAVANITDLSKNKQDKRFFTLSDSGFTTFSFSAACGWLCTAL 150
OY 126 EADQPVRLTLQLEPENGGMNAPITDIFYFOQ 153
Db 151 EADRLVSLTLNRPEEA--MMVTKKFFQK 175

RESULT 9
ID Q9UHA5 PRELIMINARY; PRT; 157 AA.
AC Q90HA5;
DT 01-MAY-2000 (TREMBLrel. 13; Created)
DT 01-MAY-2000 (TREMBLrel. 13; Last sequence update)
DT 01-MAR-2001 (TREMBLrel. 16; Last annotation update)
DE FILL ERA.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=20092888; PubMed=10625660;
RA Smith D.E., Kenschaw B.R., Ketchum R.R., Kubin M., Garika K.E.,
RA Sims J.E.;
RT "Four New Members Expand the IL-1 Superfamily.";
RL J. Biol. Chem. 275:1169-1175(2000).
DR EMBL: AF201833; AAF5213.1; -.
DR HSSP: P10749; 2MTB.
DR InterPro: IPR000975; -.
DR Pfam: PF00340; IL1; 1.
DR PRINTS: PR00264; INTERLEUKIN1.
DR PROSITE: PS00253; INTERLEUKIN_1; UNKNOWN_1.
DR SMART: SM00125; IL1; 1.
SQ SEQUENCE 157 AA; 17702 MW; 7A54F3D7557A3EE3 CRC64;

Query Match
Best Local Similarity 24.4%; Score 200.5; DB 4; Length 157;
Matches 54; Conservative 24; Mismatches 61; Indels 15; Gaps 6;

OY 9 FRMKRSALKVLIYLNHNNLLAGGLGKLGKAYIKGEISVYPRKMLDASLSP-----VLGVQ 62
Db 12 YAIRSRQMWVWVLSNSLIAPL--SRSTKIPYTLHLIACR-DTFESDKKGNMYVLGIK 67
OY 63 GGSQCLSCG-VGOEPTLTLEPNINMELYLGAKESKSTFYRRDMGLTSSFSESAAYPGWFL 121
Db 68 GKDLCLFCAEIQGKPTLQLEKENINDLYVEKKAQKPLFEHNKESGSTSVFGSVSPGMFI 127
OY 122 CTVPADQPVRLTLQLEPENGGMNAPITDIFYFOQCD 155
Db 128 ATSTTSGQPIFLTK--ERGITNN--TNEYLDSEV 157

RESULT 10
ID Q77771 PRELIMINARY; PRT; 72 AA.
AC Q77771;
DT 01-NOV-1998 (TREMBLrel. 08; Created)
DT 01-NOV-1998 (TREMBLrel. 08; Created)

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